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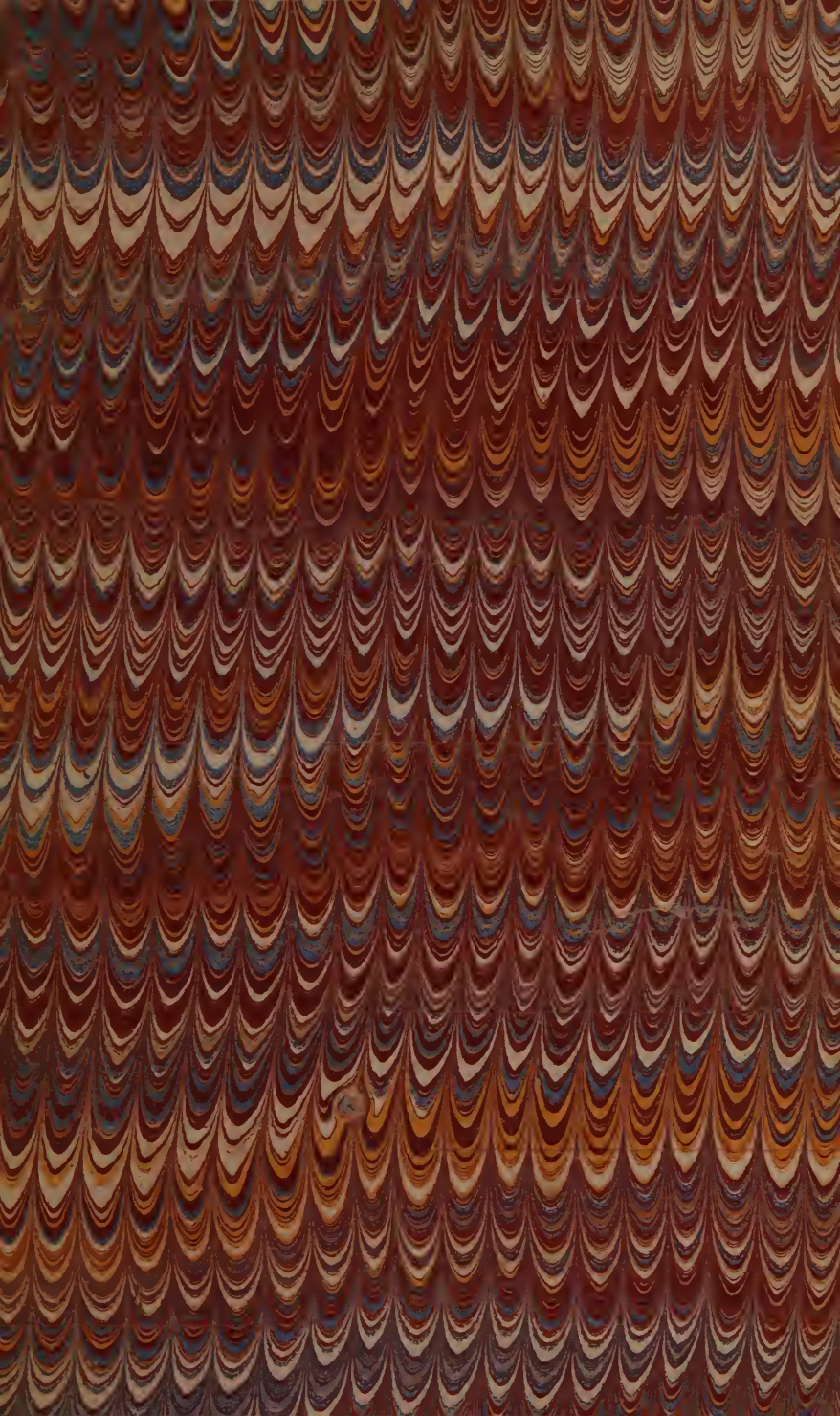


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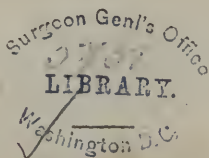
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SKETCHES
FROM THE
HISTORY OF YELLOW FEVER;
SHOWING ITS ORIGIN;
TOGETHER WITH
FACTS AND CIRCUMSTANCES
DISPROVING ITS DOMESTIC ORIGIN,
AND
Demonstrating its Transmissibility.



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S K E T C H E S

FROM THE

HISTORY OF YELLOW FEVER.

INTRODUCTION.

DIVERSITY of sentiment, has, from time immemorial, been the proverbial trait of the medical profession ; but never has there been a subject which has more effectually served to divide the opinion of the medical world than Yellow Fever. The reason of this appears to be very obvious ; there has always been a propensity in the medical profession, to prosecute by means of abstract speculation, their researches respecting subjects which can only be elucidated by investigations into facts and physical relations. In the controversies respecting yellow fever, argument and the subtleties of logic have been exhausted in vain ; while the unbiassed portion of the public, contemplating the simple and generally admitted facts, and perceiving their plain and obvious bearing, have arrived at correct opinions by a more speedy and certain method, than the devotees to doctrines, or the votaries of speculation.

In regard to yellow fever, many medical men biassed by theory, have been led to disregard important facts, or to mould them to suit their preconceived notions ; while the intelligent and unbiassed portion of the public, having no theory to sustain, and the reason unfettered by the fictions and prejudices which too often constitute a large portion of the acquirements of medical education ; have generally formed a just estimate of the facts which have presented themselves to their observation. It is a well known fact, that in those parts of our continent where epidemics of yellow fever are of frequent occurrence, the most intelligent and experienced of the people, who have not allowed themselves to be biassed by interest, are forced into the conviction that the disease is, under certain circumstances at least, communicable ; and that it is always introduced into the place in which they have witnessed it, from some other place where it was prevailing.

The opinion once prevailed, that yellow fever was communicated only by personal contagion, and among the most strenuous advocates of this opinion, in 1793, was Dr. Rush, who, however, afterwards sustained a different opinion. "But this physician declared in dying, that in so doing he had yielded to *certain considerations*, and that he had never ceased to believe that yellow fever was contagious.* It is probable that the considerations which led him to this measure, were the feelings of humanity; for too often, at that time, the dread of contagion and the instinct of self-preservation preponderated over the feelings of friendship and the ties of affection. The first symptom of the disease, like the plague spot, was the the signal of flight; and the sick were often left to a solitary and agonizing death, by those who should have moistened their parched lips, allayed the anguish of their suffering, and soothed despair by consolation and sympathy.

Whether he regarded the introduction of the disease as unavoidable, and hoped to disarm it of a portion of its terrors when it occurred, whether he was influenced by motives of policy, or what else soever may have been these *considerations*, certain it is, that the opinion thus inculcated has been mainly instrumental in causing, for so long a time, the neglect of all the measures of precaution, and subjecting our cities to the terrible ravages of this worst of plagues. "The doctrine taught on this subject by Dr. Rush, enforced and promulgated as it was, by his popularity, talents, and industry, has doubtless been the destruction of thousands. Had it not been for his influence in the medical community of the United States, our northern sea ports would not have been so long subject to the pestilential visitations of yellow fever. New-York, Philadelphia, Boston, and other ports of less note, would have protected their citizens by a judicious quarantine, at least twenty years sooner than they did. The southern ports, still acknowledging a vassalage to his authority, and to his arbitrary dictation, through his disciples, to this day, immolate hundreds and thousands of victims annually upon the altar of a blind incredulity. But the dawn of their emancipation begins to shadow forth a more discriminating era. A short time yet, and yellow fever shall be excluded from Charleston, New-Orleans, and all the southwestern ports of the United States."†

* Dict. des Sc. Med. art. Fièvre Jaune. Also, Hosack's Lectures, p. 224.

† Monette on Yellow Fever, p. 19-20.

It does not appear, however, that the influence of Dr. Rush, is by any means the only one that operates in our cities to prevent the establishment of quarantine regulations. The voice of policy is louder than that of reason. It is certainly not a matter of wonder, that many denizens of cities to whom wealth is brought by the wind that bears death to their fellow citizens ; and that physicians, enjoying, as they do, certain *prescriptive* privileges, have so often been heard in denunciation of the measures calculated to protect the health of our cities. But it is truly surprising that mercantile communities, with all the good sense and freedom from prejudice that generally characterizes that body, should ever oppose these salutary regulations, which more than all others, serve to promote and foster the commercial interests of the port. We would not impugn the motives of our fellow citizens, but men are generally prone to believe that opinion to be true, to which their interests incline ; and pride prompts them to maintain the principles they have once adopted. Thus it is that self-interest warped opinion, and truth, justice, and humanity have been sacrificed to expedience, policy and professional bigotry.

Happily the larger portion of mankind will not weigh the lives of their fellow citizens in one scale, and the price of blood in the other ; and if they err, it is either from not having the facts laid clearly before them, or else from blind devotion to their adopted opinions.

It is our desire to call the attention of our fellow citizens to a few facts and circumstances in relation to yellow fever ; and we hope they will regard our subject as one worthy of mature deliberation. This is our only desire ; we do not seek the public ear as an aspirant for literary or professional honors, but as the unpretending advocate of truth and humanity.

Many of the difficulties in the way of a proper understanding of the mode in which yellow fever is propagated, have arisen out of misunderstanding and confusion of the terms *contagion* and *infection*, which have been employed. Now the writers who have used these terms, have unquestionably intended to express the same identical fact. They intended merely to convey the idea, that the disease is often, under favorable circumstances, communicable from one to others. Contagion means communication only by contact ; but in speaking of yellow fever, no one ever intended to express the idea that the disease was communicated only by contact,

for the word was used as synonymous with infection. Used in this sense, the distinction between them has always been arbitrary, and the difficulties have been about words rather than about facts ; and while the profession has been quibbling about nice distinctions, precise terms, and received doctrines, the public mind, instead of being enlightened, has been confounded and misled.

Without entering into any arguments respecting these unimportant questions, we will endeavour to avoid ambiguity of expression as far as practicable. By *infection* we mean the unknown principle or means by which the disease is communicated. The term *transmission* expresses merely the fact of the communication of the disease, whether by infection or by contagion. Now what is meant by transmissibility of yellow fever, is simply this—that under certain circumstances of temperature, population, &c. the introduction of cases of the disease from abroad ; or of the air of other cities, where the disease is prevailing, whether in boxes or the holds of vessels, will tend to generate such a condition in the place, as to give rise to new cases, and finally to an epidemic of the disease. The point which we desire to prove, is, that the disease is transmissible, and consequently importable ; and the question as to whether this transmission is by contagion or infection, does not enter into the general problem at all.

In attempting to elucidate our subject, we will follow the method which appears the most compendious and plain. We will give a brief sketch of the history of the disease, as occurring in the towns of our continent and elsewhere, together with facts illustrative of its nature, and of its mode of propagation ; the influence of commerce in introducing it into our cities, and of the efficiency of strict quarantine to prevent the importation. In collecting these materials, we have availed ourselves of the records of authentic history, and the testimony of living witnesses. The objects had in view in preparing this article, render brevity indispensable, and therefore exclude extended argument. The subject, however, is one in which a plain statement of facts outweighs all argument ; and if we are assailed, denunciation is the only weapon that will be employed against us. Against this we are armed ; for if our fellow citizens fail to appreciate the motives which have prompted us, still we shall enjoy the highest reward in the approbation of our own conscience.

To our legislators, as the guardians of the public weal and

happiness, we would particularly address our remarks, and ask of them a patient and cautious investigation of the subject. Their wisdom has provided us with an admirable code of laws, protecting our rights, privileges, and property; but a paramount duty remains to them to fulfil; that of protecting the public health against the invasions of foreign pestilence, which almost annually devastate our cities and towns, bringing dismay and death to our otherwise happy and prosperous population, carrying off many of our best citizens, and filling our cities and asylums with helpless and desolate widows and orphans.

ORIGIN OF YELLOW FEVER.

There are many reasons for supposing that the Yellow fever, which is generally regarded as endemic to tropical America and the West Indies, really has not always existed there, but has been introduced since the settlement of these countries by the Europeans. Among the reasons for this supposition, are the following:—

1st. That no such disease was seen either in the West Indies, Mexico, or any part of America, at the time of its discovery or for a long time afterwards.

2d. Had such a disease existed, it could not have failed to be known by, and communicated to the Europeans, who went into the cities of the natives, and even resided among them.

3d. “That the *matlazahuatl*, the only epidemic disease known among the aborigines, was not yellow fever; as it attacked only the indians, the whites not being subject to it; while in the case of yellow fever, the whites are peculiarly its victims; negroes and indians much less frequently having it, and hardly ever dying with it. The yellow fever too, in Mexico and the West Indies is principally confined to towns, &c., and warm situations; while the *matlazahuatl* carried terror and destruction, equally to the scattered inhabitants of the mountains and table lands, the coldest and most arid regions of country.”—*Humboldt's Pol. Essay on New Spain*, vol. 1, p. 88, *New-York edit.*

4th. That we have an authentic account of its introduction into the West Indies, some time after their settlement by

Europeans. The following is an abstract of the account given by M. Moreau de St. Mery, an historian of great candour and integrity, in his *Topographical and Physical Account of the Island of St. Domingo*, vol. 1, p. 700. In the year 1690, a bloody revolution took place in the empire of Siam, the French established there, embarked for France in the ship *Oriflamme*, commanded by M. de Lestrilles, and two ships of the India Company called the *Loure* and the *St. Nicholas*. On their voyage to France, they were forced by stress of weather, to go into Fort Royal in Martinique. They brought with them a pestilential fever, of which M. Lestrilles and a great part of the crews died, and which spreading into the town of Fort Royal, carried off a large number of the inhabitants. The contagion likewise spread to all the vessels in the harbour, among which were two ships from Pondicherry, to the ship *Mignon*, and to a squadron of 3 ships of war, commanded by M. Ducasse; a great part of the crews of which died of the disease by June, 1741. The Squadron of M. Ducasse visited the Islands of St. Croix, and St. Christophe, and introduced the disease there.

1691
The disease thus introduced, spread to all the towns of the West Indies, in which, we are led by the historian to believe, it had never occurred before, and it continued to devastate in succession, most of the towns of the American continent, and to be transported from the West Indies, as a nucleus of infection, to every part of the world, with which intimate commercial relations brought them into contact. Thus, we have it appearing in several sea-port towns of Spain and France which had much commercial intercourse with the West Indies; and, in the United States we see that it occurred frequently in Charleston, in Philadelphia and New-York, all of which carried on a more considerable trade with these islands, than any other towns or colonies of our Continent.

This fever was called, from the place of its origin, "Mal de Siam," the Siam fever or disease—the patients all became yellow, particularly in fatal cases.

In 1792, a new era occurred in the history of the yellow fever on our continent, and it assumed a type more malignant than ever, in consequence of the introduction of a pestilential form of the disease, from Bulama on the coast of Africa. The following is an abstract of the account given by Chisholm of its introduction into the West Indies. "The ship Hankey sailed from England in company with another

ship, both chartered by the Sierra Leone Company, loaded with stores and adventures for the projected colony at Boullam, about the beginning of April, 1792. On board the Hankey, there were about 200 people, who were perfectly healthy on the voyage; but after being for some time at Boullam, a malignant fever broke out among those unfortunate people. Capt. Cox, finding the water at Boullam unwholesome, proceeded with his ship to Bissao, where there is a Portuguese settlement, for a supply. The ship was navigated by about 12 seamen, most of whom had not experienced sickness, and who were taken on board at Sierra Leone. Of these, before the return of the Hankey to Boullam, nine had died; and the remainder, with the captain, were reduced to a deplorable state. The scheme of settling Boullam was now abandoned, and as no additional seamen could be obtained, the Hankey was obliged to put to sea with only 4 men to navigate her. With much difficulty they arrived at St. Jago, one of the Cape de Verd Islands, where, fortunately, they found the Charon and Scorpion ships of war. Capt. Todd, of the former, humanely rendered them every assistance in his power; and, on leaving there, put two men of each ship on board the Hankey. With this aid they proceeded to the West Indies. On the third day after leaving St. Jago, the men procured from the ships of war were siezed with the fever, of whom two died, and the remaining two were put on shore on their arrival at Grenada, early in the year 1793. The disease was communicated to the crews of a great many vessels, beginning with those of the Charon and Scorpion, at St. Jago; and extended to the island of Grenada, Jamaica, St. Domingo, Barbadoes, Dominica and Antigua; and in consequence of the revival of our commerce, arising out of the favorable termination of the revolution and our various treaties of amity and commerce, the disease was, during the same year, imported to Charleston, Philadelphia, and New-York; in which cities it had not occurred previously for a period of 30 years. Since that time it has been introduced into our cities from the West Indies and Mexico almost annually, or at least as often as they are filled up with fresh subjects; and whenever neither quarantine restrictions nor commercial derangements interrupt the free intercourse between them.

After this introduction, the name of Mal de Siam was dropped, and the fever was long called Fièvre de Boullam, or Bulam fever, and finally the names pestilential or malignant, and yellow fever were adopted.

A CHRONOLOGICAL SKETCH,

Showing the dates of the most important epidemics of Yellow Fever; more particularly those of the towns of the United States and Europe; with a notice of the mode of its introduction in those cases in which we have authentic information respecting this circumstance.

Political events are generally regarded as the only legitimate subjects of history, and while volumes are heaped on volumes to illustrate some trivial and obscure trait of war or diplomacy, we are left in complete ignorance in relation to circumstances affecting the welfare, and involving the lives of thousands.

Thus it is with yellow fever—in Europe and America, how many have fallen victims to it!—In the city of Barcelona, one single epidemic of this pestilence swept off 17,000, or about one-sixth of its inhabitants; in Cadiz, Seville, Malaga, Gibraltar, Marseilles, and other European cities what numbers!—In the United States, hundreds of thousands have fallen with it; in our own city, more than 2000 have died in some epidemics, and in the twenty-two epidemics which have prevailed here, and of which we find scattered notices, it is probable that upwards of 30,000 of our citizens, among whom, too often, the flower and strength of our land, have been the victims of this most ruthless plague. Yet on what page of our country's annals are these great calamities recorded?—disasters in which more victims fell, than in all the political revolutions during the same period. With a degree of apathy and indifference, to the health of others, and for the prosperity of the country, worthy of Mahometans, we no longer trouble ourselves, when an epidemic has subsided and health is restored to our cities. That which interests not the public, is apt to be passed by in silence by the historian, and we are now indebted mainly to accident, for the little that remains to us of the history of the epidemics previous to the present century, and even those subsequent to that time, up to 1817. About the latter part of the last century, the subject of quarantine became a bone of contention for the factions of the medical men in New York and Philadelphia, and many important circumstances were developed in the course of their controversies, which were recorded in the medical works of the day, and now constitute our only lights for that century. In Charleston and New

Orleans the facts and circumstances were mostly unnoticed; or at least have not been recorded, except in the newspapers, those admirable and universal chronicles. For the facts in reference to the epidemics of New Orleans in 1817 and 1819, as also for the important circumstances in relation to those of 1822 and 1824, and the infringement of the quarantine regulations, in consequence of which the disease was introduced during those years; together with much other important matter, we are indebted to the kindness of George De Passan, Esq., of this city, who has furnished us with a large amount of fact and authority which he has collected together in regard to this important subject.

1690.—Introduced into the WEST INDIES from Siam, in Asia, and called from this circumstance, Mal de Siam, or Siam Disease. (See Moreau de St. Mery, Topographical and Physical Description of St. Domingo, vol. 1, p. 700.)

1691.—It raged in the WEST INDIES.

1694.—Carried from the WEST INDIES to ROCHEFORT, a sea port town in France.

1700.—There is a tradition of its occurrence in CHARLESTON, S. C. this year, but no historical record remains of the fact.—Hewatt calls it “an infectious distemper.” (See Hist. of South Carolina, vol. 1, p. 142.)

1703.—“An *epidemical disease* prevailed at Charleston,” this year. (Hewatt, Op. Cit. vol. 1, p. 316.)

1728.—CHARLESTON, S. C.—This year “an *infectious and pestilential distemper, commonly called Yellow Fever*,” appeared in this city. (Hewatt, Op. Cit. vol. 1, p. 316.) This is the first direct mention made of yellow fever in the history of Carolina. (Ramsay’s Hist. of Carolina, vol. 1, p. 84; also, Strobel on Yellow Fever, p. 218, et seq.)

1732.—CHARLESTON, S. C.—Introduced. (Lining, Edinburgh Phys. and Literary Essays, vol. 2, p. 408, 427; also, Strobel.)

“ PHILADELPHIA.

“ PHILADELPHIA.

1739.—CHARLESTON, S. C. Introduced. [Lining, Op. Cit. vol. 2, p. 408–427.

1740.—PANAMA.

“ GUAYAQUIL.—Introduced from Panama by the Gal-

- lions. (See Ulloa, *Relacion Historical del Viage a la America Meridional*, &c.)
- 1741.—MALAGA, Spain.—Introduced by persons who imported merchandize from the West Indies. (Villalba, *Epidemiologia de Espana*, &c.)
- “ PHILADELPHIA.—Introduced this year by a trunk of clothes belonging to a young man who had died in Barbadoes. “Lind on the Diseases of Hot Climates.” (See facts proving the transmissibility, &c.; also, Rush.)
- 1743.—WEST INDIES, Hayana, Vera Cruz, Jamaica, during March and April.
- 1745.—CHARLESTON, S. C. “Introduced.” [Dr. Lining, *Op. Cit.*; Strobel.]
- 1748.—CHARLESTON, S. C. “Introduced.” Dr. Lining, *Op. Cit.*
- 1753.—CHARLESTON, S. C.
- 1755.—CHARLESTON, S. C.
- 1762.—NEW-YORK.
- “ PHILADELPHIA.
- 1764.—CADIZ, Spain. “*Introduced by a vessel from the West Indies.*” [Lind on the Dis. of Hot Climates.]
- 1765.—PENSACOLA, Florida. This is the first epidemic of yellow fever experienced by Pensacola. It was at the close of the French and Spanish War, “A British garrison was sent from England to occupy the city, which coming by the way of the West Indies, introduced the disease.” [Monette, 121.—Williams’ Florida. p. 15.]
- 1791.—NEW-YORK.
- 1792.—WEST INDIES. An aggravated type of yellow fever introduced this year into the West Indies from Bulama, on the coast of Africa, by the ship Hankey, called Boullam fever. [See Hist. Notice; also Chisholm on the Boullam Fever.]
- “ CHARLESTON, S. C.
- 1793.—CHARLESTON, S. C.
- “ PHILADELPHIA. Introduced by a vessel from the West Indies; arrived in July. [Cary’s Account of the Yellow Fever of 1793.]
- “ NEW-YORK. Introduced by vessels from the West Indies, many of which brought refugees who fled from St. Domingo to escape a general massacre.

A vessel entered from Cape Francois, St. Domingo, with several cases of yellow fever on board. [Cary's Account of the Yellow Fever of 1793.]

1794.—WEST INDIES.

“ BALTIMORE.

“ NEW-HAVEN, Conn. “*Traced to imported contagion.*” [Monson, in Webster's collection of papers.]

1795.—NEW-YORK. Introduced by a vessel from Port au Prince. (Hosack's Practice, p. 201.)

“ HUNTINGDON, Long Island. Introduced from New-York. (Hosack.)

1796.—CHARLESTON, S. C.

“ NEW-ORLEANS. This is the first epidemic of yellow fever that occurred in New-Orleans. “*It was traced to a vessel which had brought it.*”—(Observations on the importation of yellow fever. Louisiana Courier, Nov. 27, 1820.)

“ NEW-YORK.

“ CHATHAM, on the Connecticut river, opposite to Middletown. Introduced in August, by the brig Polly, Doan master, from Cape St. Nicholas, St. Domingo, which had yellow fever on board, and had lost some of her crew on the passage. (Miner and Tully on Fevers, p. 359.)

“ KNOWLES' LANDING, on the Connecticut river, six miles below Middletown. A number of cases of yellow fever occurred. “*Every case was clearly traced to communication, in August, with an infected vessel from the West Indies.*”—(Miner and Tulley, Med. and Phys. Jour. v. 1, p. 153-8.) Probably the same vessel that infected Chatham.

1797.—CHARLESTON, S. C.

“ PHILADELPHIA. “Its introduction was attributed to foreign vessels.” (Chapman MS lectures quoted by Strobel, p. 120.)

1798.—BOSTON.

“ NEW-YORK. Introduced by vessels from the West Indies, and became epidemic first about the ship yard, near New Slip. (McKnight's Statement of facts on the yellow fever of 1798, in Am. Med. and Phys. Register, v. 3.)

“ PHILADELPHIA. Introduced by the ship Deborah,

from Jeremie, St. Domingo; which had its crew and passengers sick with yellow fever. This vessel entered July 8th. The brig Mary came in from Jamaica on the 29th of July; but the disease had already made some progress in the city before the arrival of the latter. (Wm. Currie, M. D., *Memoirs on the Yellow Fever of 1798*, p. 130.)

1798.—KENSINGTON, near Philadelphia. The ship Deborah, which brought the fever to Philadelphia, removed here to undergo repairs, and in a few days the disease appeared in the village. Those who were first attacked had communicated with the vessel; and those subsequently attacked, had nursed or visited the first. Currie, *Op. Cit.* 130.)

“ CHESTER, 15 miles from Philadelphia. Introduced from Philadelphia. (Currie, *Op. Cit.*)

“ MARCUS HOOK, 20 miles from Philadelphia. Introduced from Philadelphia. (Currie, *Op. Cit.*)

“ WILMINGTON, 28 miles from Philadelphia. Introduced from Philadelphia. (Currie, *Op. Cit.*) Dr. Litton says “no one doubted its having been introduced from Philadelphia, in the bad air of the boats, shallops, &c.” (*Med. Repos.* v. 3, p. 128–30.)

“ PETERSBURG. Introduced by ship Nestor, from Philadelphia. [Currie, *Op. Cit.*]

1799.—CHARLESTON, S. C.

“ NEW-ORLEANS. There was this year, “what was considered as proof of its importation.” [*Observations on the Importation of the Yellow Fever; Louisiana Courier*, Nov. 27th, 1820.]

“ PHILADELPHIA.

“ NEW-YORK.

“ BOSTON.

1800.—CHARLESTON, S. C.

“ CADIZ, Spain. Introduced by vessels from Havana. There arrived from Havana, where the fever raged at that time, the Spanish ship *El Aguila*, with a part of its crew sick with the yellow fever; the Spanish polacra *Jupiter*, with yellow fever on board, and some having died; and the American corvette *Dolphin*, with its crew and

passengers sick with yellow fever. A portion of the passengers went on to Seville, the rest remaining in Cadiz; the yellow fever broke out in both cities almost simultaneously. [Report of the Medical Society of Cadiz to the Congress Spain.]

1800.—SEVILLE. Introduced as above stated.

“ From CADIZ it was this year communicated to the following towns of Andalusia, viz :—Espera, Ubrique, Moron, Puerto Real, Rota, San Fernando, Port St. Maria, Arcos la Rambla, Le Briza, Las Cabezas de San Juan, Carlotta, Xerez de la Fronterra, San Lucar, Carmona, Carlolina, Louisiana and Cordova. [Rep. Supra Cit.]

1801.—CHARLESTON, S. C.

“ NEW-YORK.

“ CADIZ, Spain.

“ SEVILLE. Supposed to have been introduced by opening a box of clothes belonging to a lady who died of yellow fever. “All who were engaged in opening the box had the disease, and were the first cases.” [Rep. of the Med. Soc. of Cadiz.

“ MEDINA SIDONIA. Introduced from Cadiz, by a seller of clothes. [Rep. Med. Soc. of Cadiz.]

1802.—CHARLESTON, S. C.

“ PHILADELPHIA. “Introduced from a vessel from an infected port.” [Bally.]

1803.—CHARLESTON, S. C.

“ PHILADELPHIA.

“ NEW-YORK.—On the 30th of July some cases of malignant fever appeared, and *one man died of it, from Coffee House Slip*, after two days illness.” *About this time, several vessels having sick on board, were ordered from the Coffee House Slip to the quarantine ground.* On the 6th August, the mayor reported 33 cases, 16 of which had died. [Townsend, p. 368.]

“ MALAGA, Spain. “Spread by Infection.” [Arejula.]

1804.—NEW-ORLEANS.

“ CHARLESTON, S. C.

“ LEGHORN, Italy. On the 18th August, the Spanish ship Anna Maria, commanded by Captain Sal-

vador Liamosi, from Havana, arrived at Leghorn, via Cadiz and Gibraltar, and having lost five of her crew on the voyage of yellow fever. At Cadiz she shipped some new hands. On her arrival at Leghorn, some of the sick were sent to an inn in the city. The fever spread in the inn, and twelve persons died in it of this disease. It soon spread from this place, and other places to which the sick were carried, to all parts of the city. [See Letter from Thiebault de Bernard to Prof. Desguettes, &c.]

1804.—CADIZ. There arrived many ships from the West Indies, with sickly crews, among others was the one which infected Leghorn, which stopped and took new hands at Cadiz. [Rep. Sup. Cit. Arejula.]

“ From CADIZ the disease was introduced into Ximena, Los Barrios, Port St. Maria, and Rota.

“ GIBRALTAR.

“ ALGESIRAS. Introduced from Gibraltar, by smuggling. [Rep. Sup. Cit.]

“ AYAMONTE. Introduced from Gibraltar, by fishermen. [Rep. Sup. Cit.]

“ SAN ROQUE. Introduced from Algeiras. [Rep. Sup. Cit.]

“ MALAGA.

“ From MALAGA, it was introduced into Espejo, Esperra, Ronda, Arcos la Rambla, and Xerez de la Fronterre. [Rep. Sup. Cit.]

1805.—CHARLESTON, S. C.

“ PHILADELPHIA.

“ NEW-YORK.

“ AMBOY, N. J. A vessel arrived in New-York having the yellow fever among her crew, and not being allowed to land her freight there, hauled over to Amboy, and discharged her cargo there. The infection was thus communicated to the village. [Chapman's MS Lectures, quoted by Strobel, p. 120.]

“ NEW-HAVEN, Conn.

“ PROVIDENCE, Rhode Island.

1807.—CHARLESTON, S. C.

“ SAVANNAH, Ga. Introduced from Charleston. [Strobel.]

1809.—NEW-ORLEANS.

1810.—CADIZ, Spain.

“ GIBRALTAR.

1811.—NEW-ORLEANS.

1813.—CADIZ, Spain.

“ ST. MARIA. Introduced from Cadiz. [Rep. Med. Society of Cadiz.]

“ GIBRALTAR.

1817.—NEW-ORLEANS. Introduced from Havana. On the 18th of June, the British cutter *Phoenix* arrived from Havana with yellow fever among its crew. On the 30th Dr. Kerr attended four of her seamen who had this disease; two of whom died.

About the 10th of July, another vessel, the *Virgin del Mar*, came in from Havana, having lost a part of her crew on her passage, and several others were buried on her way up the river; several, also, died a few days after her arrival; all with the black vomit.

Several other vessels entered about the same time, from the West Indies. All the first cases, however, that occurred in the city were from the two first mentioned vessels. The disease became epidemic after the middle of July. [New Orleans Gazette, Feb. 3d, 1818.]

“ In consequence of the positive proofs of the importation of the disease in the dreadful year of 1817, the legislature of that winter passed a quarantine law; which, though far from perfect in its structure, might have been considered as a pledge of more efficient precautions.” [See N. O. Gazette, Oct. 29th, 1819]

“ WHITZEL’S LANDING, 20 miles below Natchez. Introduced by boats from New-Orleans.

“ NATCHEZ. Introduced from New-Orleans. “The steamboat *Washington* landed several with yellow fever, and the disease spread from these rapidly.” [Monette, quoted from D. Perlee.]

“ CHARLESTON, S. C.

“ BEAUFORT. Introduced from Charleston. [Monette]

“ PHILADELPHIA.

1818.—BALTIMORE. Introduced by a vessel from Havana. [Chapman’s MS Lectures, quoted by Strobel, p. 120.]

1818.—“ The code of quarantine regulations established for the protection of New-Orleans, in the winter of 1817, was repealed, notwithstanding there had been no evidence of its inefficiency; as there had occurred no epidemic since its establishment; though the yellow fever had several times been stopped at the quarantine ground, on vessels bound to the city, from the West Indies. [New-Orleans Gazette, Jan. 1820.]

1819.—NEW-ORLEANS. In June, several vessels, with crews sickly with yellow fever, entered from Havana, and about the first of July cases began to appear among the shipping in the harbour. The governor now proclaimed quarantine, by a power vested in his hands by the act repealing the quarantine law. The disease, however, had already made some progress, and the thing was given up, and vessels continued to come in; and some from Martinique, which were known to have lost some of their men on the voyage, and even on their way up the river, with the worst type of the “vomito prieto,” and not a voice was heard to prevent their mooring at the levee. The disease became epidemic before the middle of August, and assumed a character of the highest malignity; medicine lost its effects; the skill of the physician was baffled, and multitudes were carried to the grave. [New-Orleans Gaz. Jan. 7, 1820.]

“ NATCHEZ. Introduced from New-Orleans. It became epidemic about the 15th Sept. [Monette, p. 64.]

“ CHARLESTON, S. C.

“ BALTIMORE. We are informed by a medical friend, who was in Baltimore at the time the fever appeared, that a vessel had just entered from Havana, with yellow fever on board, and that communication had been held with her from the city.

“ NEW-YORK. Many cases of yellow fever occurred among the vessels at quarantine, before the 1st of August. It was probably introduced from negligence of quarantine, as cases began to appear at Old Slip and Coffee House Slip, about the 5th. [Townsend, and Tables in Appendix.]

1819.—CADIZ, Spain. Introduced from Havana, by a vessel which brought public treasure, and which was refused admittance into the port, in consequence of there being yellow fever on board. The government, however, too eager to get the money into possession, caused the vessel to enter, in transgression of the quarantine which had been established. The disease immediately spread through the city, and finally to other towns of Andalusia. [Constitutional, Paris paper, of 1819.]

“ SEVILLE. Introduced from Cadiz.

“ SAN FERNANDO. Ditto. [Rep. Med. Soc. Cadiz.]

“ PORT ST. MARIA. Ditto. [Rep. Med. Soc. Cadiz.]

“ ROTA. Ditto. [Rep. Sup. Cit.]

“ XEREZ DE LA FRONTERA. Ditto. [Rep. Sup. Cit.]

“ SAN LUCAR DE BARRAMEDA. “ [Rep. Sup. Cit.]

1820.—NEW-ORLEANS. About the the 20th of July it became known that several cases of yellow fever had appeared among the shipping, and some at boarding houses; when the mayor “desired Dr. Davidson to examine all the vessels which had lately entered the port of New-Orleans, from the West Indies, where the yellow fever was then prevailing;” who, having made diligent enquiries into, and investigated the grounds for the rumour which has prevailed in the city for some days past, that malignant fever had made its appearance; respectfully reports that—

“The schooner *Gold Huntress*, Marten master, from Havana, entered on the 17th of June, having lost two men on her passage with yellow fever:” also, that

“The brig *Charles Fawcett*, Lamont, master, from Matanzas, arrived on the 10th of July, having lost two men on her passage, and having others sick with yellow fever.”

The yellow fever became epidemic between the 1st and middle of August. [Letter of Dr. G. C. Forsyth; Extract from N. O. Gazette, Nov. 15th, 1820.]

“ On the 22d November, governor Villeré, in his valedictory address to the legislature, strongly recommended quarantine against yellow fever. [See Message.]

1820.— On the 18th of December, governor Robertson, in his inaugural message, urged the legislature to establish quarantine against yellow fever. [See Message.]

“ SAVANNAH, Ga. Introduced by a vessel from Havana; became epidemic about the 1st Sept.”

“ PHILADELPHIA.

“ MIDDLETOWN, Conn. “Early in June, the sloop Antelope, from New-York, came to Middletown, having on board a seaman from the schooner Milo, just from Savannah, who was sick with yellow fever, and who died with black vomit in a few days. The captain of the Antelope was next taken sick with the same disease, before the death of the other, but recovered.”

“Early in June, the brig Sea Island, from St. Jago de Cuba, arrived at Middletown, having lost two men on her passage, and having others sick, of yellow fever. Harrington, the tide-waiter, who first went on board of her, was likewise the first victim, and all the earliest cases were traced to communication with her.” [Beck’s Rep. to the N. York Board of Health, on the Yellow Fever of Middletown.]

“On the 15th June, the brig Defiance, from the West Indies, via Oronoko, also arrived.”

“The infection seems to be mainly attributable to the Sea Island,” [Beck, Rep. Sup. Cit.]

“ CADIZ, Spain.

“ XEREZ DE LA FRONTERA. Introduced from Cadiz. [Rep. of Med. Soc of Cadiz.]

“ PORT ST. MARIA. Introduced from Cadiz. [Rep. Sup. Cit.]

1821.—In February, the legislature of Louisiana passed a code of quarantine regulations, for the protection of Louisiana against the importation of yellow fever and other infectious diseases.

“ ST. AUGUSTINE, Florida. Introduced from Havana, in the following manner: It was on the 10th of July, 1821, that the exchange of flags took place, by which possession of the ceded territory of Florida was transferred from the Spaniards to the government of the United States. The Spanish troops, and many of the

Spanish inhabitants, who were desirous of leaving at the change of *régime*, were furnished by the United States government with transports. They set sail about the 25th of July, and arrived in Havana on the 2d of August, when the yellow fever was prevailing with great mortality. The schooner Florida and sloop Rapid, returned about the 12th of August, having lost several of their crew with yellow fever; and the schooner Alexander, on the 19th, having lost her captain and all her crew except the cook, and she was brought into port by two persons from St. Augustine. Very soon cases of yellow fever began to appear in the town. The first cases were all traced to communication with the infected vessels. The disease was epidemic in September, and was very malignant, generally terminating in black vomit. [For a full account, see Strobel, p. 131. Also, Dr. Francis' Letter; Townsend, p. 380.]

1821,—CHARLESTON, S. C.

“ BALTIMORE.

“ NORFOLK, Va.

“ BARCELONA, Spain. On the 19th of April, a convoy of 57 sail left Havana, destined to different ports of Spain, under the escort of the frigate Prompte. Of these, 24 arrived at Barcelona between the 17th of June and the 25th of July. Ten out of these 24 were known to have sickly crews, and it was soon known that the disease was of a very malignant nature, there being in many cases black vomit, and it was declared by one of the principal physicians to be highly contagious. The disease soon spread into the city, first attacking the workmen and the persons employed about, or who had visited, these vessels. On the 8th of August, the authorities commenced operations to prevent its spreading; but the germs of destruction were already sown in the devoted city; and notwithstanding the flight of one half of the inhabitants, a short time saw 17,000 of its remaining citizens fall victims to the pestilence. A great many coasting vessels also received the infection, and thus the

disease was carried to many of the towns on the Mediterranean. [For a full account, see Audouard, *Relation Historique et Medical de la Fièvre Jaune de Barcelona en 1821* ; also Parisset, Francois, et Bally, *Histoire Med. de la Fièvre Jaune*, p. 137.]

1821.—CADIZ. Introduced by vessels from the same convoy that infected Barcelona. [Op. Cit.]

“ MALAGA. Introduced by a Danish brig called the Gneison, from Barcelona. [Audouard, Op.Cit.]

“ TORTOSA, on the river Ebro. Introduced from Barcelona. [Op. Cit.]

“ MAHON, Island of Minorca. Introduced from vessels from Barcelona and Malaga. [Op. Cit.]

“ PALMA, Island of Majorca.

“ PORT ST. MARIA. Introduced from Cadiz.

“ XEREZ DE LA FRONTERA. Introduced from Cadiz.

“ ROTA. Introduced from Barcelona.

“ SAN LUCAR DE BARRAMEDA. Introduced from Port St. Maria.

“ LEBRIJA. Introduced from St. Maria.

“ MARSEILLES, France. Introduced by the Danish brig, Nicolino, infected at Malaga ; and when ordered from there to quarantine at Mahon, the captain took the responsibility of going into Marseilles. Some of the crew died of yellow fever on the trip, and a few days after her arrival, several neighbouring vessels were attacked, and the disease spread to the city. The efforts and activity of the French authorities, prevented the disease from being communicated to any other towns of France. The means adopted was a strict military surveillance, which entirely prevented communication, and was effectual in confining the disease to the limits of the city. [Audouard, Op. Cit.: also, Francois, Pariset et Bally, Op. Cit.: also, Dupuytren, Rep. on the Yellow Fever of Marseilles, in the *Repertoire de Chirurgie et Med. Clinique*.]

1822.—PENSACOLA, Florida. “Until the 12th of August, the town was perfectly healthy. About this time, there arrived in the short space of two weeks, several vessels from Havana, infected with yellow fever. The first was the cutter

Alabama, the captain of which being ill with the disease, was taken to the hotel, and from this house the infection spread.

A few days after the arrival of the Alabama, the brig Franklin, from Havana, arrived with a sickly crew, and some of her men died with black vomit, a day or two after her arrival. About the 19th of August, cases began to multiply in the town, and the disease became epidemic. [Letter of P. Alba, Esq., of Pensacola, in the Louisianian, Feb. 15th, 1823.]

"The brig Franklin, on her way out of Pensacola Bay, was driven ashore by a storm, at Fort Barrancas, and the artillery garrison being engaged in getting her off, had the infection communicated and many in the Fort died of it." [Letter of P. Alba.]

1822,—NEW-ORLEANS. Introduced from Pensacola, by the way of the Passes and Lake, in the following manner.—"About the 21st of August, there left Pensacola for New-Orleans, by the way of Bayou St. John or the Basin, two Sloops, the Ann and the Eliza, both crowded with passengers flying from Pensacola for safety. Some of the passengers were sick when they embarked, others sickened and died on the passage of Yellow Fever, and nearly all the remainder, after having landed at New-Orleans and dispersed themselves in various parts of the city, died of the same disease." The first cases that occurred among citizens of New-Orleans were traced to infection from some of the passengers in these vessels. (See letter of P. Alba, Esq. above quoted; also, Report of the Board of Health of New-Orleans, to the Legislature of Louisiana Jan. 15th 1823.)

We also learn from a report of the officer of health, that there arrived, during the summer, at the quarantine ground a very considerable number of infected vessels; and *that with the means placed at his disposal, it was not practicable in all cases to permit intercourse with the infected vessels, and to prevent passengers and seamen from leaving their vessels and getting to the*

city.—Also, “vessels were permitted to go into port, without the necessary precautions being taken ; and it rests with the Board to decide what influence vessels thus entering may have had in producing or aggravating the malignant epidemic which afflicted the city.” (Rep. of Dr. Forsythe, Off. of Health ; to the Board of Health ; Dec. 31st, 1822.)

1822.—NEW-YORK. This summer there arrived in New-York 71 vessels from the West Indies, having in all 56 cases of Yellow Fever on board, at the time of their arrival at quarantine. Besides these there was the U. S. Brig Enterprize, and other infected vessels from New-Orleans and Pensacola. Between the 1st and 9th of July, 24 large lighter loads of freight were landed at the wharf, at the foot of Rector street, from four Havana vessels, all of which had cases of Yellow Fever on board. On the 10th of July, the disease appeared simultaneously in the two houses which face each other, forming the two corners in which Rector street terminates at the wharf. These two houses, were about 50 feet from where the lighters discharged. In one a grocery was kept, and the clerk, named Thomas, was the first resident attacked ; in the other corner was the establishment of a cooper, named Reder who had been engaged in repairing the barrels, boxes, &c. which contained the landed freight. His two little daughters, one 11, the other 9 years old, had been much with him during his work on the boxes &c. at the wharf ; and they were both taken sick on the same day, on which Thomas became sick. On the 16th Thomas died, with the black vomit. On the 15th the youngest girl died, with the black vomit. On the 15th John Reder, brother to the girls, was taken and died on the 22nd, with black vomit. On the 20th a little girl, daughter of Mr. Rose, who played with the Reder girls, sickened, and in a few days died with black vomit. On the 24th and 25th, 4 new cases occurred in the same house with the last. In this way the disease was traced from family to family, as the result

of communication, until the epidemic became general. (For further particulars, See Townsend on the Yellow Fever of New York in 1822.)

This year the quarantine codes of New York and Philadelphia, were so modified, as to remove, to a great extent, the imperfections pointed out by Drs. Bayley, Townsend and others, and the regulations were made much more rigid.

1823.—NEW-ORLEANS. Cases occurred first among the Shipping in the harbour, in the month of July, and the disease became epidemic early in August.

“ NATCHEZ. Introduced by Steamboats from New Orleans. The first cases occurred in the city about the middle of August, and the disease became epidemic early in September. (Monette p. 65.)

“ COONVILLE. At the cross-roads, 4 miles from Natchez. Introduced from Natchez by the families who fled from the epidemic. The air of Coonville became as strongly infected as that of Natchez, and several persons who passed through, or visited it, from the neighbourhood, took the disease and died in the country with black vomit. (Monette p. 66.)

“ BROOKLYN, New York. Introduced by Ship Diana, from New Orleans. (See cases &c.)

“ SIERRA LEONE, Coast of Africa.

“ ISLAND OF ASCENSION, in the Atlantic Ocean, about 1000 miles from the Coast of Africa ; a mountainous and barren, little island. Introduced from Sierra Leone by the British Sloop of War the Bann. (Report of Wm. Barry, Staff Surgeon, on the Y. Fever of Ascension.)

1824.—NEW-ORLEANS. Introduced by the tow-boats, which were in the habit of towing up infected vessels lashed abreast, thus receiving the infection, and in turn communicating it to the city. The first cases occurring in the city were on board these tow-boats. (See Documents in relation to the introduction of the Yellow Fever into New-Orleans in 1824.)

“ CHARLESTON, S. C.

1825.—NEW-ORLEANS.

“ NATCHEZ. Introduced by Steamboats from New

Orleans. The first cases appeared under the hill, at the river, among the clerks of a Commission house, and others at the landing. It was conveyed to the upper town, by the removal of the sick from under the hill, to the houses of friends in the city. (Monette p. 67.)

1825.—WASHINGTON, 6 miles back of Natchez. Introduced by refugees from Natchez, where the disease had become epidemic. Within 10 days after their removal to Washington, 8 of them died of yellow fever, and the disease soon became epidemic in the village, (Monette p. 67 & 68.)

“ PENSACOLA.

1827.—CHARLESTON, S. C.

1829.—NEW-ORLEANS.

“ BATON ROUGE. This year, many Spaniards fled to New-Orleans in consequence of the political revolution which had taken place in Mexico. Soon after their arrival in New-Orleans, the yellow fever appeared, and they removed to Baton Rouge. But they had been exposed to the infection, and the yellow fever appeared among them about the time of their arrival at Baton Rouge, and many of them died. The disease was soon communicated to the resident population, and raged with great mortality.

“ NATCHEZ. Introduced from N.Orleans, (Monette.)

1830.—CHARLESTON.

1831.—CHARLESTON.

“ NEW-ORLEANS.

1832.—CHARLESTON.

1833.—NEW-ORLEANS.

1837.—NEW ORLEANS. The first cases occurred on board of vessels from the West Indies.

“ BATON ROUGE.

“ NATCHEZ. Introduced from N. Orleans. (Monette.)

“ PLAQUEMINE. Introduced from New-Orleans.

“ OPELOUSAS. Introduced by a person who came sick from New-Orleans. (See Letter of Dr. Cooke on the yellow fever of Opelousas in 1837.)

“ SIERRA LEONE. Coast of Africa.

“ ISLAND OF ASCENSION. Introduced from Sierra Leone, by H. M. brigantine Forrester. (See facts &c.)

1839.—NEW-ORLEANS. Introduced from Havana. We are informed that the first cases occurred on board Havanna vessels, and that the fever was during some time confined to the shipping. It was epidemic about the middle of August.

“ MOBILE. Introduced from New-Orleans.

“ BAY OF BILOXI. Do. Do.

“ ST. JOSEPH'S. Do. Do.

“ TAMPA BAY. Do. Do.

“ NAVY YARD AT PENSACOLA. Introduced from New-Orleans. The first cases that occurred at the Yard, was in a gentleman who had just arrived from New-Orleans, and who was sick at the house of Dr. ———, of the Navy. He died with black vomit, on the 5th of September. The Dr. himself, and a negro man who had nursed the gentleman, were taken sick simultaneously with the fever, a few days after his death. The next cases, were other members of the Doctor's family, and several physicians and other persons, who attended on, or visited the Dr. while sick. The infection then spread through the Yard. (For this information we are indebted to the kindness of Dr. J. A. Wedderburn, U. S. N.)

“ GALVESTON, Texas. Introduced from New-Orleans. [See Ashbel Smith on Yellow Fever.]

“ HOUSTON, Texas.

“ DONALDSONVILLE. Introduced from New-Orleans.

“ PLAQUEMINE. Do. Do.

“ PORT HUDSON. Do. Do.

“ BAYOU SARA. Do. Do.

“ FORT ADAMS. Do. Do.

“ NATCHEZ. Do. (Monette.)

“ GRAND GULF. Do. Do.

“ VICKSBURG. Do. Do.

“ FRANKLIN. Introduced from New-Orleans under the following circumstances. “Direct communication, between New-Orleans and Attakapas, is seldom open, until towards January, and then the boats run through the Bayou Plaquemine. In October 1839, the Steamer Tomochichi was placed on the sea route. On her first or second trip from New-Orleans, where the yellow fever

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was epidemic, to Franklin, Henry Thompson of the latter place, was among the few persons who went on board of her. He was taken sick with yellow fever in a few days afterwards and was the first who died with black vomit in the village. It was remarked, that nearly all those who visited him took the disease, and many of them died. Mr. Birdsall's family were particularly attentive to him, and they were all ill, and several of them died. The neighbors who visited Mr. B's family were all taken sick, and the disease throughout could be traced by infection from one case to another." (This statement we received from Mr. Wilson of the Planter's Banner, of Franklin.)

1839.—NEW-IBERIA. The circumstances of the introduction of yellow fever into this village in 1839, we are told are as follows : " A young physician Dr. Smith, died of the disease, at Plaquemine, and his remains were carried to his friends in New Iberia, and were exposed in the village church, according to the usages of the Catholics. Many persons who entered the chapel for the purpose of seeing the remains, or for other purposes took the disease, and many died with black vomit, and the disease was communicated from them to others. (For this statement we are indebted to two highly accomplished physicians, Drs. Cooke and Taylor, of Opelousas : who however were not personally cognizant to the facts, but received them from those who were.)

" ST. MARTINSVILLE. Introduced from New-Orleans.

" OPELOUSAS. Introduced from New-Orleans. (For full account of its introduction, see Letter from Dr. Taylor, &c. on the fever of 1839.)

" ALEXANDRIA. Introduced from New-Orleans.

" CHARLESTON, S. C. Introduced by vessels from the West Indies ; of which 36 entered between the 1st of May and the 30th of July. The first cases that occurred were from the ship *Burmah*, on the 7th of June ; that vessel having left Havana on the first of June. The disease first spread among the shipping of the port, and by

the 10th of July it had become epidemic in the city. (Strobel p. 171 et seq.)

1839.—SAVANNAH, Ga. Introduced from Charleston. (Strobel.)

“ AUGUSTA, Ga. Introduced from Charleston. (Strobel)

“ PORTLAND, ME. Introduced by a vessel from the West Indies.

1841.—NEW-ORLEANS. Introduced from Havana. It is yet well remembered in the city, that the first cases were on board the _____ from the West Indies, and it prevailed some time among the shipping before it became epidemic in the city.

“ 1841 NAVY YARD, AT PENSACOLA. The U. S. Sloop of War the Levant came in from Vera Cruz, and as there were many cases of yellow fever among her crew, she was deserted, and the crew encamped in a large timber shed in the Navy Yard. The disease continued to prevail among the crew, but for two weeks it did not communicate to the inhabitants of the Yard. But at the end of this time it spread to the building, nearest the shed, and finally through the Yard. (This fact was derived from Dr. J. A. Wedderburn, U. S. N.)

“ Quarantine established at Natchez, which since that time has been effectual in preventing the introduction of yellow fever into that city.

1842.—NEW-ORLEANS. The first cases of yellow fever occurred among the shipping from the West Indies and Mexico, and it continued to prevail among the shipping some time before it spread through the city.

“ OPELOUSAS. Introduced from New-Orleans. The first cases of yellow fever was a French pedlar, named Etienne Franquez, who had been to New Orleans, where the disease was prevailing. He was attacked on the day of his arrival at Opelousas, and died with black vomit.

The 2nd case was Chassan, clerk in the store of Chaudet, who had given his personal attendance on Franquez, and watched with him one or more nights. He also had black vomit before his death.

The 3rd case was Renaud, clerk in the store

of Blanchin, Riche & Co., had visited both of the first cases. He died with black vomit. Other cases immediately succeeded, and the disease soon became epidemic. (For these particulars we are indebted to a young man, who saw all these cases, and was particularly intimate with the 2nd and 3rd persons who died of the disease.)

1843.—NEW-ORLEANS. All the first cases that occurred, were persons who had arrived in vessels from Havana, Vera Cruz, &c. Those who saw the first cases, were satisfied that its source was foreign. It became epidemic early in September.

“ MOBILE.—Introduced from New-Orleans. It did not occur here until about the middle of October.

“ BATON ROUGE. The disease appeared here in October. There was daily communication with New-Orleans by steamboats.

“ PORT HUDSON. Many cases occurred here in October. There was daily communication by steamboats with New Orleans.

“ ST. FRANCISVILLE, (the upper part of the town at Bayou Sara, it stands on the bluff adjoining the town of Bayou Sara.) Many cases of yellow fever with black vomit occurred, and it was considered as of local origin. But a case of yellow fever was taken from Baton Rouge to Bayou Sara—and C. Ratliff, Esq. informed us that he saw a man from New-Orleans who died at the Hotel in St. Francisville before any of the citizens took the yellow fever, and the man threw up a great deal of black matter. The infectious nature of the fever, in these cases, was unquestionable, as the connexion between the cases was perfectly obvious.

“ VICKSBURG. Probably introduced from New-Orleans, as there was a line of steamers, constantly plying between the two places, besides the immense number of passing boats.

“ RODNEY. Derived from the same source as that of Vicksburg.

“ WASHINGTON, N. C., at the mouth of Tar river. Introduced by a vessel from the West Indies. [Washington Republican Sept. 4th 1843.]

ON THE TRANSMISSIBILITY OF YELLOW FEVER.

This has been the subject of remarkable difference of opinion, and of much controversy, Among the believers in its transmissibility, we may enumerate the following bodies and distinguished individuals:

The Army Medical Board of Great Britain, in 1816. The College of Physicians of Philadelphia, in 1793; and, also, in 1796. The Commission sent by the king of France to examine the yellow fever of Barcelona, in 1821. The Royal College of Physicians, in 1815; &c. &c.

Drs. Francis, Fellowes, Sir Gilbert Blane, Currie, Mc Griggor, Stewart, Chisholm, Hosack, Pimm, Robertson, Townsend, De Witt, Bayley, Dupuytren, Larrey, Wright, Lining, MacKittrick, Pugnet, Arejula, Palloni, Cailliot, Thiebault, Bally, Ulloa, Lind, Desgenettes, Bruce, Moreau de St. Mery, Moreau de Jonnes, Dickson, Dr. Litton, Tweedie, Pariset, Francois, &c. &c.

While Humboldt, Rochoux, Gilbert, Clark, and some others, have very correctly stated the fact, that the disease, though communicable under some circumstances, lost, in a measure, its property of being communicated under others. Thus, though in the country, and in cold weather, the instances of its spreading are rare, yet in towns, &c., during warm weather, it is highly infectious.

Opinions respecting the Transmissibility of Yellow Fever.

Answer of the College of Physicians of Philadelphia to the governor of Pennsylvania, who called on them for their opinion in regard to it:—

“No instance has ever occurred of the disease called yellow fever, *having been generated* in this city, or in any other part of the United States, as far as we know; but there have been frequent instances of its *having been imported*, not only into this, but into other parts of North America, and prevailing for a certain period of time. From the rise, progress, and nature of the malignant fever, which began to prevail here about the beginning of last August, and extended itself gradually over a great part of the city, we are of opinion that this disease was imported into Philadelphia, by some vessels which arrived at port after the middle of July. In this

opinion, we are further confirmed, by various accounts received from unquestionable authorities."

Signed by order of the College of Physicians,
Nov. 26, 1793. JOHN REDMAN, Presid't.

Again, in 1797, the College maintained the same opinion to the legislature of Pennsylvania:

"The College is of opinion, that the yellow fever is *derived from imported contagion*." For which opinion, they assign the following as among the reasons. "The disease in question is essentially different from the fevers that occur in this climate, and which originate from domestic causes. It also differs essentially from them in being contagious."

Dr. Rush has always been regarded as a violent opponent to the supposition of the transmissibility of yellow fever, but he asserts most positively,—

That yellow fever may be contracted by "sleeping in the sheets, or upon a bed impregnated with the sweats and other excretions, or by being exposed to the smell of foul linen or other clothing, of persons who had the yellow fever. [Med. Repository, vol. 6, p. 156.]

Also, that "when the atmosphere is charged with miasmatic effluvia or pestilential exhalations, a *single case of yellow fever will excite the disease* in a whole family." [Med. Rep. vol. 6, p. 160.]

He also states, that in 1741, it was introduced into Philadelphia in a box of clothes." [See Facts, &c.]

He also advises us "to prevent the landing of persons affected with the *ship fever*, in our cities, and the more dangerous *practice of ships pouring streams of pestilential air, from their holds upon the citizens, who live near the docks and wharves*." [Op. Cit. vol. 6, p. 166.]

In 1821, the yellow fever prevailed in Barcelona. The Royal Academy of France, by order of the king, sent three distinguished physicians, M.M. Pariset, Francois and Bally, to investigate the origin and nature of the disease, and to report what steps would be necessary to prevent its introduction into France. The following extract from their report, contains an expression of their opinion, in regard to its transmissibility:—

"The facts which establish the property with which we are engaged, (*contagion*) are so numerous, so various, and

yet of so perfect an identity, even in their variations; the proofs, and counter-proofs of the *transmission* of the disease, and of its *non-transmission when precautions are used*, are so decisive, they speak so loud, that the mind is subjugated, and every objection falls to the ground. Had we only the example of our unfortunate friend Barcelona, that example would be peremptory. Yes! in our judgment, the yellow fever is contagious, and the conviction which we have acquired, is confirmed by what took place at Tortosa, when communication propagated it, as at Barcelona; by what took place at Mahon and at Marseilles, *where insulation limited its progress, and extinguished its activity*. This conviction, now-a-days, has obtained even among the people, for in the end *nothing can resist the authority of facts, and the good sense of the public often takes the advance of the hesitations and sophisms of interest and science.*"

PARISET,
FRANCOIS,
BALLY.

Opinion of the Board of Health of New-Orleans, respecting yellow fever in that city in 1822.

"The researches made by the board at the commencement of the late epidemic, lead them to believe that the yellow fever *was imported* towards the end of August last, by a vessel from Pensacola, arrived at the basin of Canal Carondelet; and attention was first attracted to the disease in a family by the name of Lynch, passengers in said vessel. This family, of which every member but one fell victims to the yellow fever, had removed to Bienville-street, when the disease first spread, and from here extended through the city."

"The Board of Health believe it their duty to do away with the impression, made by interested persons, to induce a belief in the the inutility of the powers which you have so wisely conferred on the board, for the establishment of quarantines, which these persons wish to see destroyed." * * *

"This opinion is diametrically opposed to that of the Board of Health, who believe that the yellow fever is contagious, and that the establishment of quarantines is necessary to prevent its introduction." [Report of the Board of Health to the Legislature of Louisiana, January 15th, 1823.]

No one who has seen yellow fever becoming epidemic in villages, where the relations of daily life are less complex

than in a large city, and where communication is readily ascertained, can doubt that the disease is, often at least, communicated by infection; and the same is easily remarked in the communication of the disease from one ship to another, or from a ship to an island or insulated town, or where it occurs on plantations, &c. This is rendered evident by the facts, that—

1st. Nurses, physicians, and other persons, attending on or visiting yellow fever patients, are generally the first to have the disease, and that too, after the lapse of such a length of time, as generally to lead to the opinion that they received the disease from the sick.

2nd. The disease is generally taken by those who enter an infected house, vessel, or place.

3d. The disease is frequently communicated from one vessel to another, when meeting and holding communication, at sea or in port, and also from vessels to remote islands, [as Ascension] and to insular towns.

4th. There are many instances in which the air from infected places, confined in vessels, boxes, &c., has excited the disease in those persons who enter, or open such holds, boxes, &c., and the disease has thus been introduced into towns, ships, and other places.

5th. If the disease is not communicable or infectious, why is it that the arrival of cases of it in our cities, during summer, from abroad, leads every one to dread the occurrence of other cases among the citizens soon afterwards?

6th. If yellow fever is not infectious, why is it that it has so frequently spread and become epidemic in quarantine establishments, as in that of New-York, when no disease of the kind existed in the city?

7th. If the disease is not communicable or infectious, how can we account for the fact, that in a few years, five physicians, health officers for the quarantine of New-York, have fallen victims to it, while there has not been a case known in that city during 22 years?

Instances Proving the Transmissibility of Yellow Fever.

All the instances given in the chronological notice of epidemics, in which the introduction of the disease could be traced to importation, might be arranged under this head:

but it is desirable to present individual instances separately, as they cannot with propriety be introduced into that list, and it is also desirable to present a few cases in which its origin can only be attributed to this source.

1st. In 1792, when the ship *Hankey*, from *Bulama*, arrived at *St. Jago** with the yellow fever on board, and in great distress, she fortunately found there the *Charon* and *Scorpion*, sloops of war. These vessels kindly furnished her with four seamen, and sent some of their people on board to make repairs in her rigging, &c. These people, after returning to their ships, took the disease, and it was communicated to the crews of both ships. [See *Chisholm* ; *Origin, &c.*, of the *Bulam Fever*.]

2d. On the 19th of May, 1795, the *Thetis* and *Hussar* frigates, captured two French armed ships, from *Guadalope*, on the coast of *America*. One of these had the yellow fever on board, and out of fourteen men sent from the *Hussar*, to take care of her, nine died before she reached *Halifax*, on the 28th, and five others were sent to the hospital sick of the same disease. Part of the prisoners were sent to the *Hussar*, and though care was taken to select those seemingly in perfect health, the disease was introduced, and spread rapidly in that ship. [Strobel, p. 20.]

3d. In 1817, while the yellow fever was epidemic in *New Orleans*, *Phillips'* barge left the city for *St. Francisville*, and soon began to lose her passengers and hands. To replace the latter, new hands were continually engaged, who took the disease in succession, so that it was with great difficulty the voyage was performed; and finally, of the captain, crew and passengers, not one survived! The owner of the barge, *Mr. Stoker*, who resided at *St. Francisville*, having visited her at the landing, paid the forfeit of his life for his imprudence." [New-Orleans Gazette, Feb. 3, 1818.]

This fact is well remembered by many of the inhabitants both of *Feliciania* and *New-Orleans*.

4th. About the middle of August, 1822, the cutter *Alabama*, from *Havana*, arrived at *Pensacola*, having during her passage lost two of her crew by yellow fever. She anchored as near the shore as the water would permit, and on the same day, the captain, who was unwell, went ashore with his baggage, and took lodging at *Mr. Stutson's* boarding house, and in a few days afterwards died of the black vomit. The lady of the house next took the disease and died; her daughter next died with yellow fever. The boarders in the house, of

* One of the *Cape de Verd Islands*.

which there were fourteen, fled to different parts of the town, but they had already received the infection, and most of them were immediately taken sick, and five or six of them died. The fever spread over all the block of houses in which Stutton's stands, and soon throughout the city, and to the canton in the neighbourhood. [Barber's Statement respecting the Yellow Fever of 1822.]

5th. In 1822, while the yellow fever was prevailing in Pensacola, the brig Franklin, [one of the vessels which came infected to Pensacola,] sailed from there for Mobile; but at the entrance of Pensacola Bay, she experienced a heavy gale, which drove her on shore at Fort Barrancas. She was here sold, and in order to get her afloat, some of the artillery men, in garrison at the fort, were employed. A few days afterwards, the yellow fever broke out among them. The infantry stationed a short distance from the fort, and who had not assisted in working at the brig, did not suffer at all." [Letter of P. Alba, Esq. of Pensacola.]

6th. The British sloop of war, the Bann, bound to St. Thomas, left Sierra Leone, where the yellow fever was prevailing, on the 27th March, 1823, with three cases of yellow on board. After her departure, the fever cases accumulated so rapidly, that instead of proceeding to the island of St. Thomas, she went into the island of Ascension, on the 25th of April, and there debarked her sick. The infection was communicated to the garrison of the fort, and to the sloop of war Driver, and many died. [Report of Assistant Surgeon Sinclair, of H. M. sloop of war Bann.]

7th. In June, 1823, the ship Diana arrived at New-York, from New-Orleans, where the yellow fever was epidemic; and having cases of the disease on board, was detained in quarantine thirty days, and about the 1st of September was allowed to come up to Brooklyn, Long Island. In a few days, the yellow fever appeared in the village, in a family living close to where the vessel lay, and which had communicated with it. The disease soon spread in the village, and on investigation, it was ascertained that there were cases on board the Diana, and that there had been others on board previously. Many of the citizens of Brooklyn died of black vomit, among whom were many of its most respectable inhabitants. [Dr. Townsend in a letter to Geo. De Passau, Esq.]

8th. In 1837, the yellow fever prevailed extensively at Sierra Leone, when on the 5th of December, H. M. brigantine, Forester arrived there, and remained until the

9th, when she sailed for the island of Ascension. About the time she sailed, the yellow fever appeared among her crew, and several died of it before they arrived at Ascension. In January, 1838. She arrived at Ascension, and debarked her sick at Comfort Cove; from here the infection spread to the barracks, and a large number of the garrison died. [Strobel, p. 80.]

Facts proving that Yellow Fever may be Communicated by the opening of Boxes, Rooms, the Holds of Vessels, &c., which have been closed in the midst of an infected atmosphere.

1st. Lind reports, that in 1741, the trunks containing the clothes of a young man who died of yellow fever in Barbadoes, being opened in Philadelphia, all the persons present contracted the disease, which was afterwards communicated to the rest of the city. [See Lind on the Diseases of Hot Climates; confirmed by Rush.]

2d. In 1809, Capt. Edward D. Turner, who resided at Point Houmas Plantation, received from New-Orleans a trunk of goods which was packed during the prevalence of an epidemic of yellow fever there. It was opened and the clothes taken out by a negro nurse in the presence of himself and his lady. They all three were taken within a few days, and all died of black vomit.

3rd. In 1817, several boxes of dry goods were forwarded from New-Orleans, by Mr. Wm. Flower, to Mr. Lindsey at the Choctaw agency. A few days after unpacking the goods, Lindsey, who had not been to New-Orleans, was taken with yellow fever and died with black vomit. [This circumstance is yet well remembered by several of the old inhabitants of New-Orleans.]

4th. Mr. Allen, of Jackson, La. [an interior village,] received a lot of goods from New-Orleans, which were packed during the prevalence of an epidemic in that city, [the precise year is not remembered.] He was taken sick with yellow fever, a few days after unpacking them, and died with black vomit.

5th. In 1821, after the union of Florida to the United States; among other vessels employed in transporting the Spanish troops and inhabitants from St. Augustine to Ha-

vana, was the schooner Florida. On the 12th of August she returned from her trip to Havana, having lost several of her crew with yellow fever. On her arrival, and while anchored in the bay, the clothing of the crew was sent ashore to be washed, and a family named Devellin, undertook to do the washing. By this means they took the disease, and nearly all of them died, and they were among the first who died of it in St. Augustine. [Strobel, p. 132.]

6th. The schooner Alexander, one of the cartels which transported the Spanish troops, &c. to Havana from St. Augustine, arrived at the latter place on her return, on the 19th of August, having lost her captain and all her crew except her cook, and was brought into port by assistance sent from the town. While anchored near the town, the cook also died, and his bedding and bedclothes were thrown overboard in cleaning the vessel, and were carried with a flood tide up North River. Mr. Thomas Fitch, who was going to his plantation up the river, picked them up, and carried them in his boat. He was taken sick, as also a negro woman who washed them, and both of them died of black vomit. Mr. F. having returned to St. Augustine before he died, communicated the disease to his whole family, and was the first person who died of it in the town. [Strobel, p. 183.] 183

7th. Dr. Bayley informs us, that "on the 8th of July, 1822," the U. S. brig Enterprise, from Havana, arrived at the quarantine ground of New-York, with ten cases of yellow fever on board, and twelve others were taken immediately after their arrival. The vessel was perfectly clean, and free from any animal or vegetable putrefaction, or bad odour. The sick were removed to the hospital, and the well men were removed to the shore to avoid the infected air of the vessel. She was then thoroughly cleansed, ventilated, washed and whitewashed with lime in a ten-fold degree; lime was slaked in her timbers in large quantities—yet after this purification, she retained the infection, and communicated the yellow fever to those who afterwards went on board, of whom five out of eleven died. The process of purification was again instituted—artificial ventilation with windsails was constantly performed—water was daily let in to the depth of several feet, and pumped out again—lime was strewed in the hold, and her timbers thoroughly whitewashed, and still the infection was not destroyed until the cold weather. [See New-York Med. and Phys. Journal, vol. 1, p. 426-7.]

ON THE LOCAL ORIGIN OF YELLOW FEVER,

And of the Condition of Locality, Miasm, Weather, &c., to which it has been supposed to owe its origin.

1. Those who have looked for the causes of yellow fever in local condition, have attributed it in turn to filth, marsh air, miasm, heat, &c. We will examine each of these things briefly in turn.

2. If marsh air, miasm, filth, heat, &c., are the requisites necessary to the production of the disease, it should always occur when these concur; but the cities are just as filthy, as marshy, the air as much charged with bad odours, marsh air and miasm, and equally hot, during those years when the disease does not occur, as during the worst epidemic seasons.

3. If locality, marsh air, miasm, heat, &c., are capable of producing yellow fever, why did it not occur in Charleston, Philadelphia, New-York, or any of the towns of the United States, between the years 1762 and 1791? And why not from the commencement of the embargo, 1807 until 1817, after the termination of the last war? Why not in New-Orleans, previous 1796? And why not in New-York or Philadelphia since 1822? For during these periods when the disease did not occur, we can conceive of nothing capable of modifying the local conditions in which the disease is supposed to take its origin.

4. Some have asserted that "yellow fever cannot spread in high situations, but is dependent on low and flat countries, or unhealthy wharves." If this be the case, and an unhealthy or marshy situation is requisite; how does it occur in Portland, (Maine;) the bay of St. Louis; in Pensacola with its clean, sandy beach, its pure springs, and its dry, hilly pine barrens, affording perhaps the most salubrious climate of any town on our continent? How in the mountain site of Medina-Sidonia, Ronda, and Ubrique; in the heights of San Roque; the barren and mountainous island of Ascension; the barren and elevated rocks of Curaçoa, of Cadiz, and Lisbon; the sea-girt and lofty rock of Gibraltar? all of which places fanned by the refreshing breezes from the sea, are remarkable for the salubrity and purity of their air, the entire absence of marshes and fens; and the mere supposition of miasm and putrid exhalations in such situations would be preposterous. Still, when the yellow fever is carried by commerce to these

places, it is in no degree less terrible than in the low and marshy situations of New-Orleans, Mobile and Charleston.

5. If yellow fever is produced by domestic influences, why has it never been known to occur in Natchez, Vicksburg, Rodney, Bayou Sara, Port Hudson, Baton Rouge, Plaquemines, Alexandria, Opelousas, Franklin, St. Martinsville, New-Iberia, Donaldsonville, or in any of the towns of the interior, which trade with New-Orleans in those numerous years when it did not occur in that city? And why is it, that when it does occur in those towns, it does not appear until after it has been prevailing in New-Orleans, from 15 to to 30 days at least? Why has it never been known to occur in Savannah or Augusta, except when Charleston has first suffered? Why has it never been known to occur in the innumerable interior towns of Andalusia, in Spain, except on particular occasions, when the great commercial sea ports of Cadiz, Seville, and Barcelona, have received the infection of the disease from abroad, and been ravaged by the terrible pestilence? And why, as in all other cases, did the interior cities suffer, only after the prevalence, during some time, of the disease in the seaports?

6. If yellow fever is generated by filth, marsh air, miasm, heat, &c., why does it not begin its ravages in the back parts of New-Orleans; and why, formerly, did it not begin in the middle of New-York, the dirtiest parts, respectively, of these cities; and why does it always first show itself in, and spread among the shipping, then to parts of the city nearest to the sickly ships? [*For the facts in reference to New-York, see Townsend, p. 290.*]

7. If a crowded population, filth, marsh air, miasm and high temperature are capable of generating yellow fever, why does it not appear in Venice, built in the midst of sea-marshes, traversed by stagnant and filthy canals, and inhabited by a crowded, idle and negligent population; or in Ravenna, built in marshes, traversed by muddy and filthy streets, and surrounded with putried fens?

8. If filth and bad odours have anything to do with generating yellow fever, why is it, that clean, well ventilated, and sweet vessels, are not less subject to the disease than those which are foul? Dr. Bayley, who was for many years health officer in New-York, says, "many infected vessels, arrived here without any unusually offensive smell, and the infection spread to others; while many from tropical regions have cargoes of animal and vegetable matters in a state of

putrescency, with great foulness, and the extrication of much stench ; yet no disease existed among the crews, or in those who assisted in discharging the putrid cargoes. [Dr. Bayley's letter to Dr. Townsend ; Townsend on Yellow Fever, p. 92.]

9. It is asserted by many that yellow fever would never prevail in New-Orleans in seasons when there had been great rains, or when the Mississippi river was very high, and the swamps filled with water. To this, we have only to oppose the last summer, (1843) when the water was very high and the summer very rainy ; and 1837, when it rained a great deal ; and yet in each of these years there was an epidemic.

10. A high temperature is generally supposed to be a requisite to the production of yellow fever, but the history of the disease shows that neither its occurrence, nor its violence, bears any direct relation to temperature. Thus, the physicians of Cadiz inform us, that the years in which it occurred in the Spanish cities, were by no means warmer than others, and that the summer of 1804 was very cool compared with those of 1787, '89, '90, '91, '94, and 1810, when the disease did not appear there.

We learn from Dr. Townsend, and from the tables kept in New-York, by Mr. Laight and Dr. Pennell, that the occurrence of yellow fever in that city, was not dependent on the degree of *heat and dryness*, or *heat and moisture* ; each of which combinations have been respectively regarded as the *sine qua non* ; but that it occurred there, likewise, in remarkably *cool summers*, and did not occur in many of the *hottest* ones. Thus, in the summer of 1796, the fever prevailed in New-York, though it was remarkably *cool and dry*. In 1809, the fever prevailed, and it was one of the *coldest* summers ever known, and *very wet*. While it did not prevail in 1793 and 1841, which were among the *hottest and driest* summers ever known, nor in 1820, which was *hotter* than any year when it prevailed, excepting two, and was *very wet*.

In New-Orleans and Natchez the same remarks are equally applicable. Thus both in 1817 and 1819, the summers were much cooler than those of 1814, 1816, and 1818, and the former were bad years ; in fact, 1817 was one of the worst years ever experienced for yellow fever, while the latter three years were healthy. [Parlee on the Yellow Fever of 1817 and 1819.] In Natchez, the years 1824 and 1825 may be compared.

	1824.		1825.	
	Temperature.	Rainy Days.	Temperature.	Rainy days.
JULY.....	86	12	81	12
AUGUST....	82½	9	83½	11
	84¼	21	82¼	23

Now this table* shows that the summer of 1824 was much *warmer* and *rather dryer* than 1825; but in 1824 Natchez was entirely clear of fever, while in 1825 it prevailed as early as August with great violence. (Monette, p. 36.)

In New Orleans the summers of 1837 and 1843 were remarkably *cool and wet* and the yellow fever prevailed in this city both years to a terrible extent. In 1839, 1841, and 1842 the summers were *hot and dry*; the first was a bad yellow fever year; while in the latter it was comparatively mild.

In Natchez, the summer of 1837 was *cool and wet*, while that of 1836 was *hot and dry*, and the yellow fever nevertheless prevailed there both years. In 1841, to the contrary, memorable for the *intensity and duration of the heat*, and equally remarkable for its *excessive dryness*; and in 1843, an *excessively wet and remarkably cool* summer, there was an entire exemption from yellow fever in Natchez.

11. One writer asserts, that "the occurrence of yellow fever depends principally upon the want of ventilation of the climate by powerful winds; hence the popular opinion that hurricanes and fevers do not prevail the same year.!" This notion shows a want of the most ordinary observation, for many of the epidemics of New-Orleans have been preceded by gales; in other cases, storms have occurred during the prevalence of epidemics, without in any degree checking its ravages. We learn too from Mr. Laight and Dr. Townsend, (p. 329) that in August, 1791, there were gales, and that the fever broke out in New-York after they had occurred. That in 1801, during the month preceding the appearance of the fever there were no calms, and that there were several very hard gales and squalls. (p. 368.) That in 1803, during the epidemic, the deaths increased after a violent gust. (p. 368.)

It will be remembered, that in Louisiana, there was a violent storm of wind and rain about the 1st of October, 1837, during the prevalence of the epidemic in New-Orleans and Natchez, but the disease did not abate at all—and it was a few days after this storm, that the yellow fever made its first appearance in Opelousas.

* From Tables of Dr. Tooley of Natchez, as quoted by Monette, p. 36.

In conclusion then, we may safely say, that though the transmission of yellow fever is favoured by high temperature, yet it does not essentially depend on such a condition to become epidemic. And when it once becomes epidemic in a city, it is well known not to require a high degree of heat to continue its ravages ; and nothing less than a freezing temperature seems capable of entirely checking it.

Filthiness of streets, sewers, yards, and want of cleanliness in houses, person and apparel, though apparently inadequate to generate yellow fever, unquestionably has the effect of aggravating the disease, and promoting its extension, in the same way as it does that of typhus or any other disease.

ON THE INFLUENCE OF COMMERCE IN INTRODUCING YELLOW FEVER.

The influence of commerce, in introducing yellow fever, into cities, cannot fail to be remarked by examining the facts which have been presented ; and it will be observed that as far as is known, there has never been an epidemic of this disease, in any city not having communications with the ports of the West Indies, or with some place in which the disease is epidemic.

But in order to render this fact more apparent, and to dissipate any doubts that may remain of the means of its introduction, we will give a brief sketch of the history of its occurrence, in some of the principal commercial towns of the United States, in which it has been of almost habitual occurrence, New York, Philadelphia, Charleston, New Orleans, &c. And at the same time that we show the relations between the state of commerce and the introduction of the disease, we will show what have been the effects of restrictions and suspensions of commerce in preventing its appearance in our cities.

In glancing over the imperfect chronological sketch which we have given, it will be perceived that the different seaports which have been subject to the visitations of yellow fever, have not been equally so at different epochs of their history ; that during long periods they have been almost annually subject to the disease, and then again during long spaces of

time, they have entirely escaped. As it is impossible to attribute this to any local circumstance, we will seek for other causes, that may be deemed efficient to account for these variations in the frequency of its occurrence.

In examining into the commercial relations of our cities, it will be necessary to bear in mind that they were founded by different nations, with different customs and different commercial connexions, and that the commerce of each was not necessarily affected by the treaties, which protected or discouraged, or the wars that prostrated the commercial intercourse of the others. Thus Philadelphia, New York and Charleston, were either settled by or fell into the hands of the English at an early period; while St. Augustine, Pensacola and New Orleans belonged to the French and Spanish until a comparatively recent time. We will therefore examine them under two heads.

The difficulties which were encountered in the settlement of the British American Colonies were only partially surmounted, when they began to engage actively in commerce, which was soon carried on in vessels of their own building. As early as 1660 their commerce had become so important as to excite the jealousy of the mother country; every year many of their vessels were seen in the most distant oceans, and in the Mediterranean even, they began to compete successfully in some branches of trade, with European nations and with England herself. The jealousy of the English gave birth to the famous navigation act, which originated 1660, embodying the most odious system of commercial monopoly, that ever disgraced a civilized nation. The object of the act was to secure the monopoly of the important trade of the colonies to the mother country. Notwithstanding the restrictions and duties imposed by this act, a trade sprung up between the continental colonies and the British West Indies. The northern colonies sent lumber, staves, fish, flour, corn &c., while from Charleston were shipped lumber, staves, and after 1724 rice. In return they received sugar, molasses and rum. Scarcely was this trade established by annual visits of vessels from Charleston, when the yellow fever began to make its visits also, and these visits increased in frequency, with the increase of intercourse with these islands. Previous to 1724, there were in Charleston two epidemics, which are supposed to have been yellow fever; but at that time the trade increased so rapidly, that in 1740, the annual amount of rice exported was 91,100 bar-

rels, and in consequence of this increase of intercourse, we have the yellow fever introduced frequently, and finally, almost annually.

Philadelphia carried on its trade in flour, bread stuffs &c., likewise with the British West Indies, and the yellow fever began to appear in 1732, and the epidemics became almost as frequent as in Charleston.

New York came into the possession of the English in 1674, and began its trade with the British West Indies at a later period than the former cities, and was for some time much less subject to the epidemic of yellow fever.

Now each of these cities existed a great number of years without ever having a case of yellow fever to occur; and it was only after this commerce with the West Indies, that they became subject to the disease.

The principal of commercial monopoly, commencing in 1660, runs through 29 acts of Parliament ending in 1764; but the monopoly had become gradually more oppressive until about 1750, when it had almost destroyed the trade between the colonies and the West Indies. The consequence was that the introduction of yellow fever into those cities was entirely prevented, and it did not occur in Charleston after 1755, and in New York and Philadelphia after 1762, so long as the commercial monopoly was in force, which was only interrupted by the war of the revolution, which of course likewise entirely prevented this trade. No sooner however, were the treaties of peace ratified after the revolutionary war, than our commerce again sprang up with redoubled life and vigor, and in 1791 we have the yellow fever occurring again in New York; in 1793 in New York, Philadelphia and Charleston, and all of these three cities were again subject to almost annual epidemics of the disease.

Thus in this period of commercial prostration, we have 30 years or upwards elapsing, without a single case of the disease appearing in these cities, which had been continually liable to its attacks during the time in which trade had flourished.

After the revolution, the trade of these cities continued prosperous and without interruption until December 22d, 1807, when the embargo was laid on all vessels bound to foreign ports, and continued in force until March 1st, 1809, at which time, so much of the act as concerned vessels not belonging to, or trading with England, France and their de-

pendencies, was repealed. This non-intercourse with England, France &c., continued in force until May 2d, 1811, after which it had effect only against Great Britain, until April 4th, 1812, when an embargo was again declared against all vessels trading to any foreign ports, for 90 days, at the expiration of which time, war was declared against Great Britain, which lasted until 1815. Here we have a period of eight years, during which the trade of these three cities with the West Indies was entirely prostrated, or at least it was only during three years from 1809 to 1812, that the trade was permitted even with the Spanish West Indies, and their trade with these had always been very limited. In fact as far as these three cities were concerned, the Embargo and non-intercourse Act had the effect of closing their ports against the trade with the West Indies.

As soon, however as peace was declared, and commerce was re-established, we have the disease again appearing in our sea-port towns; and in 1817 was introduced into Charleston, Baltimore, and Philadelphia. After this period New-York and Philadelphia were regularly subject to epidemics of yellow fever, until they respectively established rigid quarantine regulations, which was effected in 1822, by amending that in force there before that period, since which time the disease has been totally unknown in those cities. It has, however, been almost annually brought in many West India vessels to the quarantine ground; it has sometimes spread in the quarantine establishment, and it is only by great strictness, that it has been prevented from reaching these cities.

The cities on the southern coast, St. Augustine, Pensacola, and New-Orleans, carried on but little trade previous to their cession to the United States, which, for the latter, was in 1803, and, for the former, in 1821. The consequence was, that they were rarely visited by yellow fever. In New-Orleans, it appeared first in 1796, and but once more before it came into the possession of the Americans.

In Pensacola, it appeared in 1765, after its transfer to Great Britain, when it was introduced by the arrival of English troops from the West Indies; after this time, it did not occur until 1822, the year after its transfer to the United States. St. Augustine never suffered from yellow fever previous to 1821, when it was introduced from Havana by our transports, which had carried the Spanish troops and inhabitants who removed at the change of government.

The commercial intercourse between New-Orleans and the West Indies, being principally confined to the Spanish islands, was only interfered with by the embargo laws from 1807 to the spring of 1809, and by the war from 1812 to 1815, leaving three years of uninterrupted trade with the Spanish islands, during a period in which trade with the British and French West Indies was entirely prevented. The consequence that the yellow fever was epidemic in two of those years in that city; while it did not appear in any of the years during which the embargo was in force, or during the war. But no sooner was peace declared, than New-Orleans became the mart of a most prosperous and active commerce. With the revival of this commercial prosperity, the epidemics of yellow fever again commenced their devastating invasions, since which time the city has been continually liable to its attacks during the summer season. In 1821, a mockery, in the shape of a quarantine was established, which in consequence of its total inefficiency, had no effect in preventing the introduction of the disease. It had, moreover, a most pernicious effect, in prejudicing many well intentioned persons against the establishment of such an institution, by leading them to regard it as a useless restriction upon trade. The fact is well known, that the inadequacy of that institution was solely attributable to the imperfection of the law, and not to the fallacy of the principle upon which quarantine is based. We should also bear in mind, that perfection is not immediately attainable in anything; and if our legislators, instead of repealing this law, had ascertained by experience its defects, and remedied them by amendments and additions, we should long ere this have been relieved of the epidemics, which since that time have destroyed so many valuable lives and brought such desolation into our city.

GENERAL CONCLUSIONS.

1. Yellow fever is a disease not native to the continent of America; but of foreign origin; introduced first from Siam, and afterwards aggravated in its type by the importation of the Bulam fever. [See Historical notice.]

2. No well authenticated case of the *specific disease called yellow fever* has yet been known to occur on the American continent, under circumstances which precluded the possi-

bility of infection, or ever rendered it probable that it originated independent of transmission either by going into infected localities, opening boxes or parcels from infected places, visiting boats or vessels from infected towns, or opening rooms closed during the prevalence of an epidemic.*

3. Since the introduction of the yellow fever into America, it has always existed on some part of its coast. It prevails almost perpetually near the equator, where the temperature of winter is rarely low enough to destroy the infection; and it is carried by commerce to the countries lying north during the portion of the year between February and November, and to the regions to the southward from August to May. Thus in Surinam and Demarara it is indifferent as to seasons; in Campeachy, Vera Cruz and Havana it begins from February to May; in the United States from June to October; while at Pernambuco and Rio Janeiro it prevails generally from November to May. In this way it prevails perpetually, changing its place as the seasons vary, visiting the cities as soon as they are filled with fresh subjects, and when commerce offers facilities for its introduction.

4. Yellow fever is a disease *sui generis* and peculiar, and not a grade or type of bilious fever; as is shown by the fact that, as in the plague, measles, small pox, and other specific and infectious diseases, one attack diminishes the liability to and almost exempts from a second attack; while it in no way diminishes the liability to bilious fevers at all. Neither do attacks of bilious fevers, of the severest grades, in any manner diminish the liability to take the yellow fever.

5. The yellow fever is not produced by a crowded population, neither by heat, moisture, marsh air, miasm, filth, nor by any combination or concurrence of these; otherwise it should always occur when these concur, and should not occur when the particular combination is absent: neither of which we find to be true.

6. The transmission of yellow fever depends exclusively on intercourse and commercial relations; any city being liable to infection in the precise ratio of its proximity to, and of its unrestricted communication with ports or places where the disease is epidemic. It is from this circumstance that quarantine derives its pre-eminent efficacy in the exclusion of this disease from cities. Dr. Townsend remarks that "although the imperfection of medical science places the cure of

* In large cities, the complicated relations of daily life render it difficult to trace up the infection to its source; and it is only in small towns that we can always arrive with certainty at the desired information,

the disease too often beyond our control, and that our means of counteracting its progress are limited, a wise Providence has indemnified us for these losses, by putting into our hands an *effectual method of totally preventing its occurrence, by shutting out its introduction from abroad*. It is left for us to carry into execution what our own judgment must now teach us is the only resort that is left."

"I firmly believe that the source of the disease can only be cut off by a rigorous code of quarantine restrictions." [Townsend, p. 228.]

7. "Yellow fever requires for its transmission, a moderate summer temperature, a certain accumulation of people, as the crew of a vessel or the population of a town, city, &c."

8. Under certain circumstances of population and temperature, the introduction of persons with yellow fever, or of the air from places where the disease is epidemic, will frequently give rise to new cases, and finally to an epidemic of the disease. The infection may be conveyed.

1stly. In boats or vessels which remain at the wharves, &c., in the infected city, receiving and discharging freight, and then closing their hatches upon the contained air, may become the sealed vehicles of the transmission.

2dly. Boxes or bales, containing goods, particularly woollens, if packed and closed in an infected atmosphere, may convey the infection.

3dly. The clothes, bedding, &c., which have been used by persons with yellow fever, have been known to communicate the disease.

9. Certain ports are almost annually subject to epidemics of yellow fever. These, during the summer, we should always regard as infected, and during that period we should strictly enforce quarantine against all vessels sailing from or touching at them. Now such rigour towards towns of the United States, would be unnecessary; for should cases of yellow fever occur in any of our towns, we would hear of it by mail, before it could become epidemic in the place, and often in less time than it would require for a vessel to arrive here from there. But with the West Indies, the case is different, for we learn that at the quarantine in New-York, the first intimation they have of the disease prevailing in those places, is from cases of, or death by it occurring on vessels arriving from them. So that if we only enforce quarantine against those places where the disease is known to prevail, we may have "cargoes of infection" introduced into our ci-

ties before the health officer even suspects any place of being the seat of an epidemic.

10. The healthy state of a vessel's crew, is no proof that she may not be infected; for the crew may all be acclimated, while the infection may be sealed up in her hold, or contained in the cargo, &c., and may only exhibit itself after the arrival at a healthy port, and among the unacclimated persons who may visit or receive freight from her. [See Bayley's letter, Townsend, p. 92.]

11. Cleaning and ventilation do not always destroy the infection in a vessel. Therefore, quarantine, with these precautionary measures, is not a sufficient guarantee for the public health. [See case of the brig *Enterprise*; also, case of ship *Diana*, which introduced the disease into Brooklyn in 1823.]

12. The only measure by which the public safety can be guarded, is to prevent all vessels coming from sickly ports or places, from coming above the quarantine ground, whether their crews be sickly or not. Provision should be made, enabling them to discharge and receive freights safely and expeditiously, and arrangements should be maintained by which the freight so discharged should be delivered to the consignees, as soon as the time expires which may be deemed necessary for its perfect ventilation and disinfection.

13. The principle difficulties against which it will be necessary to guard in establishing quarantine for New-Orleans, is presented by the tow boats engaged in towing vessels from the mouth of the river. These boats, by communicating with infected vessels, or towing them up abreast, or even at hawser's length, become liable to infection, and in turn become the medium of infecting the city. The fact is established beyond a doubt, that in two of the years during the time the quarantine was in force here, the introduction of the disease was mainly attributable to these boats; and experience should lead us to provide against similar disasters in future.

14. It would certainly be safest to prohibit tow boats from towing up vessels from infected places at all; as in the various turnings of their course and shiftings of wind, it is possible that infection would be communicated even at hawser's length. At any rate, whatever the law provides, should be most scrupulously and strictly enforced, and towboats should be placed under the heaviest bonds to insure their observance of all the particulars of the law.

15. An accurate account should be kept by the quarantine establishment of the state of health on board of each of these boats, which should be subject to the same kind of examination as vessels coming in from sea ; they should be required to report the occurrence of any case of fever, or any infectious or contagious disease occurring on board ; and, during the period from the 1st of May to the 1st of December, their sick should immediately be sent to the quarantine infirmary.

16. In case of their crews becoming infected with any of the contagious or infectious disorders contemplated by quarantine arrangements, they should be subjected to the same restriction and rules as other infected vessels.

17. They should be particularly prohibited from taking as passenger any person from vessels detained in quarantine, or from receiving any freight, box, parcel, or package, from on board such vessel.

18. A landing or wharf should be provided for tow boats, at a point not in front of the thickly inhabited portions of the city.

OUTLINE OF QUARANTINE FOR NEW ORLEANS.

The quarantine ground should be at least as low as the English Turn, and on the opposite side of the river.

There should be a comfortable lazaretto on shore, for the reception of the sick, from vessels detained in quarantine.

There should be strict regulations, and these should be rigidly enforced, preventing the escape of persons from the quarantine establishment, or communicating with others from without.

The quarantine should be kept up throughout the year. And it should be the duty of the health officer, to board and examine every vessel or boat coming from sea, up the Mississippi, to any place above quarantine ground ; and he should be authorised to administer oaths to the officers or crew of any such vessel or boat.

It should be the duty of every master of vessel to submit to such examination as the health officer may deem expedient, and to give the assistance of his crew in unlading, cleaning, &c., when required by such officer. In refusing so to

do, he should suffer heavy penalties; and for false swearing, pay the forfeit of perjury. For infringing any quarantine regulation, he should forfeit, &c.

Quarantine being intended only to exclude infectious disorders, should only operate on vessels from ports where such diseases are of habitual occurrence, and on such only from healthy ports, as are known to have such disorders on board.

During a portion of the year, inference would lead us to regard as infected with yellow fever, all vessels coming from any port in the West Indies, including the Bahama islands, the Antilles, the Carribbean islands, and all other islands of the Gulf of Mexico or the Atlantic, lying near the continent of America, south of the 24th degree of north latitude, and from every port of the Gulf of Mexico or Atlantic, belonging to the shore of the continent, south of the mouth of the Rio del Norte. The same rule should apply to any vessel which may have touched or stopped at any of these ports.

As the yellow fever has never been known to be introduced from any of the above places, earlier than the first of May, or later than the first of November, it would probably be sufficient to enforce during this period, the absolute restrictions, which would be indispensably requisite to the exclusion of the disease.

Therefore, from the 1st of May to the 1st of November, no vessel or boat sailing from or touching at any port above designated, should be allowed to ascend the river above the quarantine ground; but should anchor and discharge its freight, &c., by lighters into a warehouse provided for the purpose, from whence they should be again shipped to the consignees, after free ventilation for three days, or as much longer thereafter as the health officer may deem it safe for the public health. In the same manner the said vessels should receive their return freights, which ought to be sent from the city to the warehouse, from thence on board by lighters.

All persons arriving in such vessels, during the above period, should be subject to detention in the quarantine establishment, during 7 days from the time of leaving the vessel.

Whenever there are reports, or suspicions, that cases of yellow fever have occurred in any place in the United States, Texas, or elsewhere, the vessels coming from such place or places, should be subjected to the same restrictions as those coming from ports habitually subject to the disease.

The defects of the quarantine code of 1821 were very numerous, and it may be well to remark upon some of them.

1st. It regarded personal infection as the principal, if not the only mode of communication, and overlooked the danger to be apprehended from opening the holds of vessels, boxes, &c., which had been closed in an infected city.

2d. It regarded ventilation and cleaning as a sure means of disinfection; disregarding the fact, that as far as we know, low temperature is the only agency that can be relied on safely to destroy the infection of this disease.

3d. It regarded the absence of disease on board a vessel, as in some measure proving that the vessel was not infected, whereas the infection may be sealed in the hold, and the crew all acclimated or proof against infection, the disease only exhibiting itself after the hatches are opened, and unacclimated persons of the city breathe the atmosphere which escapes.

4th. It overlooked the danger to be apprehended from communication between the tow boats and the city; while these boats towing (even at cable's length) infected vessels and holding communication with them in other ways, almost necessarily became infected, and in turn communicated the infection to the city.

THE ADVANTAGES AND DISADVANTAGES OF QUARANTINE TO THE CITY OF NEW-ORLEANS.

Quarantine is intended to facilitate the operations of commerce; and its restrictions, operating to the temporary inconvenience of but a small number, have the effect of permanently benefitting the whole.

The interruptions of commerce, resulting from the establishment of a quarantine in New-Orleans, would be confined to a few vessels, and these generally of the smaller class, engaged in trade with the West Indies. Even these would be interrupted only, in their summer voyages to some tropical ports; not being allowed to approach the city nearer than the quarantine ground, and causing them to discharge their freight there, for which every facility should be offered. It is very doubtful, whether on the part of the vessel, such an arrangement would cause a moment's delay; and therefore the delay would only be on the part of the consignees,

whose freight would be detained from three to seven days, if it were deemed necessary to ventilate it, before its entrance into the city.

Quarantine for New-Orleans, by rendering the city healthy would obviate the necessity which now exists of enforcing quarantine against our vessels during the summer, in New-York, Philadelphia and other ports where there are sanatory regulations. And these delays are more injurious perhaps to the commerce of this city than would be the entire destruction of our West India trade.

By rendering our city healthy, it would become the permanent abode instead of the mere winter quarters of its citizens, and millions of dollars now expended in travel abroad would be saved to the city; changes would be gradually effected and very soon we should have introduced all the modes of recreation adapted to the summer season, and our city would become a place of resort in summer instead of the habitation of pestilence.

Now who is so blinded to every sense of justice and humanity, as to compare the trivial inconvenience resulting from the delay of a few persons, or a small quantity of freight, for only a few days, to the desolating catastrophe, the great public calamity, of an epidemic of yellow fever. Who is there that will confess himself the advocate of a system, that values at so insignificant a price the lives of our citizens?

The unimportant inconveniences to which a very small portion of our trade would be subjected, during a few months of the year, would be much more than counterbalanced by the immense advantages which our commerce with the important mercantile portions of the world would derive during the same period, from the arrangement. And it can scarcely be doubted by the reflecting mind, that the prosperity and pecuniary interest of all would be advanced by the exemption of our city from the great public distress, the irreparable disasters and horrors of pestilence.

But this protection would not be confined to New-Orleans, or its citizens; every town on the banks of the Mississippi, every village of our state, and every person trading with, or visiting these towns, would feel its happy influence, in certain security from the invasions of this foreign plague. As it is, all the towns and landings in the state are subject to infection on account of their necessary communications with this emporium; and it is a painful fact that our best citizens are annually falling victims to the yellow fever, contracted in

the towns in their neighbourhood, which they visit most frequently with a view of seeing or nursing their friends or relatives attacked by this disease.

Natchez has wisely adopted a policy, in harmony with the present state of medical knowledge, and has completely protected her citizens against the infection, which has by means of commerce been carried from New-Orleans to Vicksburg and Rodney; and she certainly has cause to congratulate herself on having escaped a pestilence, that has carried desolation to these towns.

If we have been correctly informed, the corporate towns of our state, possess no power whatever of self protection, their charters not permitting them the privilege of restricting the commercial intercourse between themselves and other cities.

The expense of the quarantine establishment would be but trifling compared with the vast advantages we might reasonably expect to derive from it. The amount paid in New-Orleans alone, in yellow fever cases, for physicians' bills, medicines, and funeral expenses, during an epidemic season, would ten times over support the most expensive quarantine establishment in the world.

FACTS AND DOCUMENTS

In relation to the Introduction of Yellow Fever into New-Orleans in the year 1824.

“ The schooner *Emigrant* arrived at the quarantine ground, from Havana, about the 20th of July; one of the passengers was dying *with yellow fever when the health officer boarded, and another had been dangerously sick.* The health officer reported the circumstances to the board of health.” (Louisiana Advertiser, August 18th, 1824.) This vessel was towed abreast of the towboat *Balize*, from the mouth of the river to within a short distance of the quarantine ground, and communication was held with her by the people belonging to the towboat. (See Docs.1 & 2.)

The first cases of yellow fever that occurred this year in the city of New-Orleans, were in the hands of the towboat *Balize*. (See Doc. 3.)

Other towboats were likewise in the habit of towing abreast, vessels from ports infected with yellow fever. (See Docs. 4 & 5.) A regulation was subsequently adopted to prevent this, but it was not put in force until too late; the fever had already spread from the towboats to other boats and vessels in the harbour.

DOCUMENT No. 1.

Extract from the affidavit of Samuel Kirker.

"Before me, Lemuel Knight, Justice of the Peace, for the Parish of Orleans, personally appeared,"

"Samuel Kirker, of the State of Ohio, who being duly sworn, deposeth and saith,"

"That he was employed as fireman an board the steam boat Balize. That he went down in her to the Balize, from whence they towed up a schooner to the quarantine ground, on or about Tuesday last, which had arrived from the Havana. That on board the said schooner there were two persons sick, of whom, one was on the recovery; but the other was extremely sick of yellow fever, as he understood from the mate of said schooner.—That the deponent, as well as others belonging to the steamboat, went on board the said schooner, where they saw the sick man who looked extremely yellow, and who appeared to the deponent to be nearly in a dying situation, blood and matter issuing from his mouth, ears and nostrils."

SAMUEL KIRKER, his X mark.

Witness—HENRY MARTIN.

"Sworn to, and subscribed before me, at New-Orleans, this 27th day of July, 1824." LEMUEL KNIGHT,
Justice of the Peace for the Parish of Orleans.

DOCUMENT No. 2.

Extract from the affidavit of Adams, Thom, &c.

"The undersigned, master and passengers on board the schooner Emigrant, being sworn, say that the steamboat" (Balize) "made fast to us, a short distance below Plaquemines; that she towed us abreast until six or seven miles of the quarantine ground, when she dropped us astern, and towed us in that situation to the quarantine ground. That there

was no communication between the two vessels after we were towed in that situation; and that *the situation we were towed in, until dropped astern, was not communicated to the Health Officer.*"

BENJAMIN ADAMS, Master.

F. THORN,
O. DE SADOVANY, } Passengers.
DOLORES BARCELO,
A. DELAITE TAST.

G. G. FORSYTH, Justice of the Peace for the quarantine ground.

Quarantine Ground, 28th July, 1824.

DOCUMENT No. 3.

"To the Editor of the Advertiser."

"Having seen several publications made in your Gazette with a view of showing that the yellow fever has this year been introduced among us by the steamboats, that towed the infected vessels up the river; and *believing fully that the disease has been imported*; permit me to offer the following items of evidence in support of the position."

"The following report of the prescribing Physician of the Charity Hospital was made to the resident Physician on the 8th inst.,"—(August.)

"John White entered yesterday from the *steamboat Balize*, and died this morning.—*Black matter* in his mouth, and he purged black before his death."

Signed,

W. ROGERS,

Prescribing Physician.

"It is worthy of remark, that the above boat towed up the schooner *Emigrant*, and the crews had communicated with each other."

"Two cases of yellow fever from the steam boat *Post Boy* taken last night to Dr. Davidson's infirmary. One died this morning." August 10th. J. K.

N. B.—"Two more cases from the *Balize* (steamboat) reported to the board, by the resident physician as yellow fever." [Advertiser, New-Orleans, August 11, 1824.]

"Captain Adams, of the schooner *Emigrant*, died of yellow fever at the quarantine hospital, 22d August." [La. Advertiser, August 24th, 1824.]

DOCUMENT No. 4.

Affidavit of Samuel Blare.

The State of Louisiana, }
 Parish of Orleans, } Justice's Court.

"Personally appeared before me, the undersigned, Justice of the Peace, Samuel Blare, of Pope County, State of Illinois, but now of the city of New-Orleans, who being duly sworn on oath, deposeth and saith"—

That being engaged as a fireman on board the steamboat Enterprise, he went in her from the Levee, on or about Thursday, the 22d inst., when she towed a brig down to the Balize. That immediately after their arrival, the said steamboat was engaged to tow up the schooner Dorothy to the quarantine ground, where she arrived, and left the schooner on Sunday evening, the 25th inst., and then returned up to the city. That from the time of taking her in tow, the schooner was lashed close alongside the steamboat, (whose wheel is in the stern) and continued in that situation till they arrived within view of the vessels riding quarantine, at which time the schooner was dropped astern, and was towed by a hawser to the quarantine ground. That during their passage up the river, frequent intercourse passed between the two vessels, and that deponent himself was several times on board the schooner, which he understood had arrived from Tampico."

SAMUEL BLARE.

Sworn to and subscribed before me, at New-Orleans, this 31st day of July, 1824. LEMUEL KNIGHT,
 Justice of the Peace for the Parish of Orleans.

DOCUMENT No. 5.

Personally appeared before me, the undersigned, Justice of the Peace for the Parish of Orleans, William Freburger of the city of New-Orleans, who being duly sworn on oath, deposeth and saith—

"That being a fireman on board the steamboat Enterprise, he went in her from the city to the Balize, to which place they towed the brig Margaret; and immediately afterwards the said steamboat took in tow the schooner Dorothy, from Tampico, which they towed abreast of the steamboat until they arrived within about three quarters of a mile of the quarantine flag, at which time the schooner was dropt astern and towed by the hawser. That in the course of the passage, the

deponent went aboard the said schooner several times, as did others of the crew. That having left said schooner to perform her quarantine, the steamboat returned to her station in this city, on Saturday night, the 25th July."

WILLIAM FREBURGER.

Sworn and subscribed before me, at New-Orleans, this 3d day of August, 1824.

LEMUEL KNIGHT,

Justice of the Peace for the Parish of Orleans.

Extract of a Letter from Dr. T. A. Cooke, on the Opelousas Epidemic of 1837.

OPELOUSAS, La., Nov. 12, 1843.

DR. W. M. CARPENTER,

Dear Sir,—“In the fall of 1837, the yellow fever, for the first time, appeared as an epidemic in the town of Opelousas. The first resident who took the disease, and who died with all the symptoms of yellow fever was a tailor by trade named Emile Bessant. He was taken sick about the 20th October, and died on the 28th. A short time before his attack, but how long cannot now be well ascertained, he had given his personal attentions, in Gabriell's Hotel, near his residence, to a stranger who had come directly from New Orleans, and who, speedily after his arrival in Opelousas, was violently attacked with fever, which terminated fatally in a few days with the black vomit. The next case was that of Victor Miramond, resident for many years, who attended E. B. in his dying moments, and followed the corpse to the grave. In about 24 hours after the funeral, he was violently attacked, and in four days he was dead. He threw up an immense quantity of black matter. From and after the 1st of November, the disease gradually extended for some 3 or 4 weeks, after which period it gradually subsided, but did not disappear until after several severe frosts.”

T. A. COOKE, M.D.

Dr. Taylor's Letter on the Opelousas Epidemic of 1839.

OPELOUSAS, Nov. 19th, 1843.

Dear Doctor,—I hasten to comply with my long delayed promise of furnishing you with some facts in relation to the Fever which prevailed here in 1839.

On the 16th of August, 1839, I was requested to see a man by the name of Fisk, who had been brought into the village that evening, from the steamboat landing. On the following day, impressed with the belief that the disease did not possess the ordinary characteristics of the fevers of the country, I requested Drs. Cooke and Jewell to visit the patient with me, who after a careful examination concurred with me in pronouncing it a case of yellow fever.

The treatment pursued was unsuccessful, and he died with black vomit on the fifth day from the time I first visited him.

Upon enquiry, I learned that he was unacclimated, that he had been to New-Orleans, where he had remained some four or five days, and that he was taken sick on the boat on his way to this place. Between the 21st of August and the 14th of September, although several cases of fever occurred in my practice in the village, I do not now remember whether they possessed or not the characteristic features of the disease of which Fisk died; owing, perhaps, to the fact that my attention was not strongly directed to the probability of the existence of such a disease amongst us, until it had begun to assume somewhat the characteristic of an epidemic. If the fevers treated by me intermediately, between the 21st of August and the 14th of September, had a common origin with the wide spread and fatal epidemic, which immediately succeeded, they were mild and manageable, and not of a character to be remembered at this distance of time.

I find that the following cases occurred in the order in which they are set down.

September 14th, P. Roy; 16th, Madame Alfred; 17th, S. C. Craft, F. David, N. Wenslier; 18th, Mr. Pressy, C. L. Swayze, and a negro of Andrews; 19th, B. R. Gannt, Young Walker; 20th, J. Bell, Mrs. Andrews, Mr. Ward, Mr. Bowen, E. W. Taylor, and negro; 21st, O. A. Guidry, Reid, Bossier, and a negro of Gannt's, &c.

I give the cases of the first five days to show the progress the disease made after it had fairly assumed an epidemic form. There was one fact in connection with the disease, which was remarked by all the attending physicians at the time, and that was—that when one member of a family was attacked, it generally went through the whole family. E. W. Taylor had a family at the time, of some 10 or 12, of whom but one I believe, escaped. There was a singular sort of fatality attending those who nursed the sick in the village. Mr. Gannt,

I remember, had three nurses in as many days, who were taken sick one after the other, and all proved to be extremely ill. These are instances out of many such that subsequently occurred. There is another fact which has occurred to me since I spoke with you on the subject. The first case, that of Fisk, was carried to the Eagle Hotel. I do not recollect a single individual connected with that house, either of the boarders or servants, who escaped the epidemic.

I have thrown this together very hurriedly, but if it contains anything that tends to throw light on the subject you are investigating, I am sure you will excuse the hurried and imperfect manner in which the information you ask is conveyed.

With great respect, yours,

To W. M. Carpenter, M. D. J. A. TAYLOR.

Note to Letter of Dr. Taylor on Epidemic of 1839.—Dr. G. Hill informed me by note that he had visited “a Mr. Hartshorn, on the 2d of September, who died with black vomit on the 7th. Hartshorn had nursed Fisk until his death, attended to his funeral arrangements, put him in his coffin and went to his funeral.” The case of Hartshorn is evidently one of the links of connection between the first case and those occurring about the 14th of Sept. W. M. C.

FACTS AND CIRCUMSTANCES

Relating to the alleged occurrence of Yellow Fever in America previous to the year 1690, the period at which history fixes its introduction, as stated in the historical notice, p. 9, et seq.

1st. It has been asserted by many, that the yellow fever prevailed among the Indians of New-England, Virginia, and other parts of North America, from 1617 to 1623. We have in relation to this pestilence, facts which establish beyond a doubt that it was not yellow fever, but a disorder similar in many respects to the *matlazahuatl*, the epidemic disease described by the Mexicans, &c. The following are some of them :

“On the 19th of May, 1619, Capt. Dermer in an English vessel, sailed from Monhiggan, an indian town (perhaps in New-York) along the coast, on his way to Virginia, and landed at several places where he had been the year before; and he found many indian towns totally depopulated; in others a few natives remained alive, but not free from sickness. “Their disease, the plague, *for we might perceive the sores of some that had escaped; who described the spots of such as usually die.*”—

[Purchas, vol. 4, 1778. Webster on Pestilence, vol. 1, p. 176.]

“Richard Vines and his companion, who had been sent by Ferdinando Gorges, to explore the country, *wintered among the indians during the pestilence, and remained untouched, the disease attacking none of the English.*” [Belknap’s Life of Gorges; Am. Biog. vol. 1. p. 355. Webster, op. cit. vol. 1, p. 176.]

“Some of the settlers of Plymouth went to Massachusetts, (now Boston) in 1622, to purchase corn of the natives, and “found among the indians a great sickness, not unlike the plague, if not the same.” It *raged in winter, and affected the Indians only.*” [Purchas, v. 4, p. 1858. Prince’s Chron. 124. Webster, op. cit. vol. 1. p. 177.]

Again, in 1763, we have accounts of a similar epidemic among the indians.

“In August,” of this year, “the indians of Nantucket were attacked by the *bilious plague*, and between that time and February following, their number was reduced from 358 to 136. Of 258 who were affected, only 36 recovered. It *appeared infectious among the Indians only, for no whites were attacked*, although they associated freely with the diseased. Persons of mixed blood were attacked, but recovered; *not one died except of full Indian blood.*” [Philosophical Transactions of 1764; Historical Collections, vol. 3, p. 158; and MS of Moses Brown, quoted by Webster on Pestilence, vol. 1, p. 252-3.]

“In December of the the same year; the indians of Martha’s Vineyard, distant eight leagues from Nantucket, were invaded by a like fever; not a family escaped. In this instance, the *disease discriminated nicely between the whites and the Indians.*” [Phil. Trans.; Hist. Coll.; Webster, op. cit. 253.]

2d. It has been stated by several writers, that the yellow fever prevailed in Barbadoes in 1647. There are however, many facts that establish the point that the pestilence which prevailed there this year was of a catarrhal nature. The following are some of them—

“A. D. 1647. This year there appeared an *epidemic catarrh* in America, and the first of which we have any account. It is not named either influenza or catarrh, but is clearly the same disease.” [Webster on Pestilence, vol. 1, p. 188.]

“In 1647, an epidemic sickness, passed through the whole country, affecting the colonists and the natives, English, French and Dutch. It began with a cold, and in many accompanied with a light fever. Such as bled or used cooling

drinks died ; such as used cordials or more strengthening things, recoverèd for the most part. It extended through the plantations in America and the West Indies. There died at Barbadoes and St. Kitt's 5 or 6000 each. [Hubbard's MS. p. 276, quoted by Webster, op. cit. vol. 1, p. 188.]

In further support of the opinion that yellow fever did not prevail in Barbadoes previous to 1690, we may make the following quotations :

" Warren, though he lived at Barbadoes, in 1739, supposes it never appeared in that island until about the year 1721, and it was then brought from Martinique, in the Lynn, man of war. He says the second appearance of it there was in 1739, and that it came also from Martinique." [Mosely on Diseases of Tropical Climates, p. 375.]

" Hughes, who was not himself a medical man," goes farther back for its first introduction into Barbadoes, and says, " that Doctor Gamble remembered that it was very fatal in the year 1691,* and that it was called the *new distemper*, and afterward's Kendall's fever, and the pestilential fever. [Mosely, op. cit. p. 378.]

In support of the opinion that yellow fever is not a native of America, and that it did not prevail there for a long time after its settlement by the whites, we may add the following quotations.

Ulloa says, " the vomito prieto *was unknown* at Carthage-na, and all along the coast until the years 1729 and 1730." (Ulloa, Viage a la America, Book 1, ch. 5, quoted by Mosely op. cit.)

" Notwithstanding that the degree of causus† which we call the yellow fever appears, from the nature of the disease, to be indigenous to the torrid zone, *there was no notice taken of it in the West Indies until nearly two centuries had elapsed from their discovery.*" (Mosely op. cit. p. 373.)

In consequence of yellow fever being principally confined to commercial ports, and introduced generally by vessels &c., it has been called by the French, "*Fievre de Matelot.*"

In Mexico and the West Indies it is confined to seaports and commercial places and is only carried accidentally and rarely to the interior, and " there are *many medical gentlemen, natives of the West Indies, who have hardly ever seen it, their practice lying at a distance from any seaport town where strangers usually arrive.*" (Blane, diseases of seamen, p. 427.)

* It will be remembered that this was the year after its first introduction into Martinique.

† Ardent Fever.

APPENDIX TO CHRONOLOGICAL SKETCH.

1693.—Boston.—“In 1693 the seamen and soldiers, under Sir Francis Wheeler, who was sent to conquer Martinico, were seized with the plague of America, and three fourths of them perished. Hutchinson, (vol. 2, p. 72,) relates that this fleet came to Boston and introduced the disease into that town, where it occasioned a deplorable mortality. Douglas relates the same fact.” (Webster, op. cit. vol. 1, p. 207.)

1702.—“In New York raged the American plague, which was said to have been imported from St. Thomas.” “On account of it the Assembly was held at Jamaica, Long Island.” (Webster, op. cit. vol. 1, p. 217.)

1794.—New Haven, Conn.—The facts respecting the introduction of yellow fever into this town are the following. “In the beginning of June, Capt. Truman arrived from Martinico in a sloop, which was hauled up by the store of Mr. Elijah Austin, a few rods from the house of Mr. Gorham. This sloop was supposed to be infected with the pestilential fever of the West Indies. From this sloop was landed a chest of clothes which had belonged to a seaman, who died of the fever in Martinico; which chest was opened and the contents inventoried by Mr. Austin, in his store in the presence of Capt. Truman, Henry Hubbard, and of Polly Gorham. Mr. Austin and Mr. Hubbard were seized with the fever in a few days and died on the 20th of June. Polly Gorham was seized on the 12th and died on the 17th of June.” (Webster, op. cit. vol. 1, p. 303.) From these many others took the disease.

1795.—New York.—The first case that occurred was Dr. Treat, health officer, who died on the 29th of July. He had visited a man sick with yellow fever on the brig Zephyr, from the West Indies, and assisted in burying him when he died.”

“Three or four seamen, from the ship William were also seized with the distemper, in consequence of visiting the Zephyr.” (Webster, op. cit. vol. 1, p. 312.)

1797.—Philadelphia.—Introduced by the ship Arethusa, from Jamaica and Havana. (Webster, op. cit. vol. 1, p. 325.)

1797.—Providence, R. I.—Introduced by the schooner Betsey, from the Mole, Cape St. Nicholas, St. Domingo.—(Webster, op. cit. vol. 1, p. 328 et seq.)





